

COUNTY OF MILWAUKEE
Behavioral Health Division Administration
INTER-OFFICE COMMUNICATION

2

DATE: February 25, 2013

TO: Marina Dimitrijevic, Chairwoman – Milwaukee County Board of Supervisors

FROM: Héctor Colón, Director, Department of Health and Human Services
Prepared by: Paula Lucey, Administrator, Behavioral Health Division

SUBJECT: **From the Director Department of Health and Human Services, providing an informational report regarding the Department's intent to close the Behavioral Health Division Center for Independence and Development (formerly Hilltop) and Rehabilitation Center Central and to relocate residents to integrated community settings – A Mental Health Redesign Effort**

Background

Over the past three years, several Milwaukee County budget initiatives have focused on a downsizing of the Center for Independence and Development (formerly Hilltop). In April 2011, BHD notified the State of Wisconsin Department of Health Services (DHS) of its intention to begin a voluntary downsizing of 24 beds. This initiative was included in the 2013 Milwaukee County Adopted Budget. After being completed, this downsizing would leave a remaining capacity for 48 beds in the CID.

The CID has traditionally cared for individuals with co-occurring mental illness and intellectual disabilities in Milwaukee County. The primary role of facility staff is to serve as teachers, trainers and mentors for the residents while meeting their medical and personal care needs.

BHD's Rehabilitation Center Central is a 70-bed skilled nursing home located in BHD. It serves clients with complex physical, mental and behavioral needs. Neither the CID nor the services provided by Rehabilitation Center Central are a mandated program for Milwaukee County but both programs have served as an option for individuals who exhibit challenges with severe and persistent mental illness and other complex medical or behavioral issues as well as intellectual disabilities. However, they are licensed differently; CID as an ICF-MR (Intermediate Care Facility for individuals with Mental Retardation) and Rehabilitation Center Central as a Skilled Nursing Facility.

Over the past 15 to 20 years, a number of nursing home downsizing and facility closure efforts have been completed in Milwaukee County as well as across the State of Wisconsin. Indeed, the long-term care bed capacity in Milwaukee County alone was hundreds of licensed beds greater than it is today due to this long-standing trend toward deinstitutionalization. This follows a nation-wide trend to reduce the reliance on institutional care that began in the late 1970s and has continued in the most recent decade through various initiatives by both local and State agencies. BHD has been downsizing and successfully moving clients to the community for many years beginning with a Master Plan completed in the 1990s. This effort is a continuation of the commitment to complete the downsizing and support individuals in a community setting. Furthermore, it is consistent with the recommendations of the HSRI Report, national and state trends as well as the resolution passed by the County Board from the Committee of the New Behavioral Health Facility Study.

BHD and DSD have worked jointly to achieve several previous downsizing initiatives of the CID. The number of individual relocations that have been completed since 2000 is 92 (see chart below). During this period at least two units previously operated by the CID were closed in favor of community-based options for individuals with intellectual disabilities.

BHD Center for Independence and Development (CID) Relocations History CY 1999 to 2009		
Year	Facility	Number of Persons Moved
CY 1999-2000	Hilltop	23
CY 2003	Hilltop	20
CY 2003	Hilltop	5
CY 2004	Hilltop	4
CY 2005	Hilltop	16
CY 2007	Hilltop	6
CY 2008	Hilltop	9
CY 2009	Hilltop	9
Overall Total		92

Additionally, throughout the state, there have been numerous large-scale facility closures and downsizing initiatives since CY2000. The number of downsizing/closures of Facilities for the Developmentally Disabled (FDD) identified by DHS from CY 1999 to CY 2012 is 30. Among the larger initiatives were relocation efforts that ranged in size from four individuals to 183 individuals that were relocated. The time frame to accomplish these relocation plans ranged from less than 12 months to 24 months. Of the agencies that completed downsizing or closure relocation projects, the following agencies were among the larger agencies. It should be noted that three of these large relocation initiatives were completed in Milwaukee.

- 2002 – Jackson Center FDD (Milwaukee) – 79 residents relocated in 10 months
- 2002 – Hearthside Rehab FDD (Milwaukee) – 183 residents relocated in 12 months
- 2003 – Marian Franciscan FDD (Milwaukee) – 62 residents relocated in 24 months
- 2003 – Northern Wisconsin Center (Chippewa Falls) – 152 residents relocated in 24 months
- 2005 – Horizons Unlimited FDD (Rhinelander) – 74 residents relocated in 12 months

Research has consistently shown that individuals have an increased quality of life in a community setting provided that setting has the environment and staffing to meet the individual's needs and that sufficient community support is available. In October 2010, the Human Services Research Institute (HSRI) of Cambridge, MA completed an analysis of the Milwaukee County BHD system and provided recommendations for systems

change resulting in a more community-based system of care. The study also compared BHD with other metropolitan behavioral health systems across the country.

The HSRI study pointed out that in Milwaukee County there are an excessive number of inpatient beds given the population of the County. The report stated, "Estimates of the appropriate number of adult psychiatric beds in a mature well-managed mental health system should be in the range of 18 to 22 beds per 100,000 adults. Thus, the range of beds theoretically needed for a system the size of Milwaukee County would be between 126 and 154. With 472 public and private acute care beds, 140 extended care rehab beds, and 18 observation beds, Milwaukee County far exceeds the number of beds deemed necessary for inpatient psychiatric care for adults."

The State of Wisconsin DHS has also implemented a number of initiatives that focus on downsizing, diversion or closure of both nursing homes and ICFs/MR. The following is a summary of initiatives that have been implemented since 2005 and has resulted in a significant reduction in the use of institutional or nursing home/ICF-MR beds:

In a report to the Wisconsin Joint Finance Committee dated August 20, 2012, Secretary Dennis Smith reported the following relocation information in accordance with Section 51.06 (8), Wisconsin Statutes:

The Department's relocation and diversion programs have been highly successful, providing the opportunity in SFY11 for 499 elderly individuals and people with physical and developmental disabilities to live in community-based settings who otherwise would have resided in ICFs-MR and nursing facilities. Since FY06, approximately 4,319 elders and people with physical and developmental disabilities have successfully relocated from institutional settings and an additional 932 individuals were diverted from admission to a nursing home through the Department's programs. The quality of life for these 5,251 individuals has been enhanced through the opportunity to live in the community, be near family and friends and be more fully involved in community activities.

Highlights of the relocation and diversion initiatives include:

- 755 people with developmental disabilities, many of whom resided in institutions for decades, moved to the community and participated in community activities not previously available to them.
- 2,410 frail elders who resided in nursing facilities chose to live in the community near their families and friends. Prior to the Community Relocation Initiative these individuals would have been on a waiting list for home and community-based care, and few would have had the opportunity to return to the community.
- 1,154 people with physical disabilities chose to live in the community where they were able to access community activities.
- People with developmental disabilities have been served in the community at a cost that is within the institutional budget for this population.
- Frail elders and people with physical disabilities are being served in the community at a cost below that of institutional care, resulting in a level of savings under the Medical Assistance Program in SFY11 of \$2.2 million for the people relocated during the year.

The statewide initiatives that have been implemented since 2005 include:

ICF-MR Restructuring Initiative – Community Integration Program 1A Community Relocation Initiative Money Follows the Person Nursing Home Diversion Program – The ICF-MR Restructuring Initiative serves persons with developmental disabilities receiving active treatment in a non-state-owned Intermediate Care Facility for the Mentally Retarded (ICFMR) or a non-state-owned nursing facility. (Relocations from the three State Centers for Persons with Developmental Disabilities are part of the Community Integration Program 1A described below.) The initiative was authorized in the 2003-05 biennial budget bill and became effective on January 1, 2005.

Under the initiative, counties are required to prepare a community plan for every person residing in an ICF-MR and for every person seeking admission to an ICF-MR. The plan must be submitted to the court and the court must consider the plan, along with other information presented to the court. If the court determines that the community is the most integrated setting appropriate to the needs of the individual, the court must order the person to be served in the community. If the person with a developmental disability was a resident of an ICFMR or a nursing facility, the initiative allows money that was previously used to fund his/her institutional care to follow the person into the community to fund community-based care. Funding can also be used under this initiative for community placements for people relocated from facilities that are closing or downsizing. Under this initiative, the entire cost of the person's care plan is funded by the state. Therefore, no county tax levy funding has been required to fund these relocations.

Community Integration Program (CIP) 1A - The Community Integration Program 1A supports relocations of individuals with developmental disabilities from the three State Centers for the Developmentally Disabled to community settings. The CIP 1A program began in 1981. As established in the 09-11 biennial budget, effective SFY 2010, the State adopted a universal budgeting methodology that eliminates an upper limit on daily costs (formerly \$325) and provides the full funding needed in the community for each relocated resident. In SFY 2011, one person relocated from a long term care program in a State Center to the community.

Community Relocation Initiative - The Community Relocation initiative provides elders and persons with physical disabilities residing in nursing homes the opportunity to relocate to community settings. People being cared for in nursing homes have a choice to remain in their current setting, or move to the community, if their care needs can be met at home, in an apartment or in an assisted living setting. The funding being used for an individual's institutional care "follows" the person into the community to be used in the home and community-based waiver. The Community Relocation Initiative was authorized in the 05-07 biennial budget bill and began in August 2006. In SFY 2011, a total of 359 people relocated from nursing homes under the Community Relocation Initiative. Of the 359 total, 223 were elders and 136 were people with physical disabilities. These individuals chose to live in the community where they could be closer to family and friends and more fully access community activities.

Money Follows the Person – In January 2007, the State was awarded a federal "Money Follows the Person" (MFP) Medicaid grant to support rebalancing of the long-term care system through further relocations from institutions to the community. Starting October 2007 and continuing to October 2016, the federal government will pay an enhanced matching rate higher than the standard Medicaid matching rate for the costs of certain relocated individuals during their first year in the community. Forty-eight of the individuals relocated during SFY 2011 also participated in Money Follows the Person. The Money Follows the Person federal grant is helping to sustain the momentum for Wisconsin's relocation initiatives.

Nursing Home Diversion Program - The Nursing Home Diversion Program provides support to individuals who are at imminent risk of entering a nursing home to be diverted from nursing home admission and remain in community settings. The program was authorized in 2005 Wisconsin Act 355 and began in April 2006.

All of the above initiatives were available in counties prior to the implementation and expansion of Family Care. In counties where Family Care is operational, the funding available from Family Care has replaced these initiatives as the primary mechanism to support individuals being relocated from institutions. Many non-Family Care counties still utilize these funding incentives.

It should also be noted that in their current biennial budget, DHS included several long term care sustainability initiatives. These new measures are intended to help curb the increasing costs to the Medicaid program but also emphasize the use of alternatives to institutionalization. Specifically, within the Family Care Sustainability, the following provision is included to help support community living for individuals with intellectual disabilities and mental health issues:

Crisis Intervention and Stabilization - Improve the capacity of MCOs and community-based providers to support individuals with complex mental health needs and challenging behaviors.

- Identify critical expertise in specialty areas that result in more cost-effective service planning and intervention for people with complex needs, including access to behavioral health professionals and use of trauma-informed care.
- Develop the capacity for comprehensive community crisis response.
 - Facilitate collaborative relationships between county mental health staff and MCOs to assure that each at-risk member has an effective response plan, which defines roles and responsibilities of all involved entities.
 - Facilitate the development of regional resources for mobile crisis response teams.
 - Utilize DD Coordinator positions within DLTC to divert admissions, assist in discharge planning and provide community resources.
- Increase capacity and expertise of MCOs in developing and maintaining effective behavior support plans and stable community settings.
 - Provide targeted training to MCO identified behavioral support specialists.
 - Promote development of back-up plans to reduce use of hospitals and institutions.
 - Provide targeted technical assistance expertise to MCOs and community providers as necessary.
- Develop resources to support relocation planning from institutional to community based settings.
 - Identify efficiencies and opportunities related to recruitment of providers and to develop appropriate community settings.
 - Assure that relocation plans and behavioral support plans contain specific strategies and projected timelines for gradually reduce, or “fade” the amount of support over time as individuals are supported and stabilized in the community.
- Explore partnering with the Waisman Center for Excellence in Developmental Disabilities to provide training and technical assistance to Family Care, IRIS and Partnership staff, and to provide assistance with relocation teams.

The implementation of these statewide initiatives will greatly assist the county in the transition of individuals from Rehabilitation Center Central and the CID.

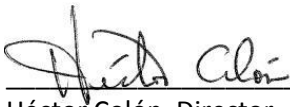
Discussion

To prepare for the 2014 Budget, BHD will begin discussions with the State of Wisconsin DHS related to the closure of the remaining beds in the CID and the beds in Rehabilitation Center Central. Working together with the State and the Family Care agencies serving Milwaukee County, community options can be developed for clients. The goal of these discussions would be to determine the best way to maximize the resources in the community, determine regulatory requirements, and develop joint planning capacity. Most importantly, however, the focus will be to provide for the health and safety for all individuals impacted by this decision and those that will be relocated.

A meeting has also been scheduled between BHD and the Family Care Managed Care Organization (MCOs) that serve individuals in Milwaukee County, the Disabilities Services Division (DSD), the Division of Housing and the Department on Aging so community planning can begin.

Recommendation

This is an informational report. No action is necessary.



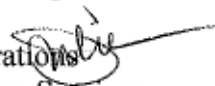
Héctor Colón, Director
Department of Health and Human Services

cc: County Executive Chris Abele
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COUNTY OF MILWAUKEE
Inter-Office Communication

DATE: February 15, 2013

TO: Chairwoman Marina Dimitrijevic
Milwaukee County Board of Supervisors

FROM: Julie Esch, Director of Operations 
Department of Administrative Services

SUBJECT: Informational Report on the Establishment of a Comprehensive Facilities Plan Workgroup

The Comprehensive Facilities Plan for Milwaukee County that was prepared by CBRE provides a thorough analysis of twenty-five buildings representing over three million square feet of space. The recommendations CBRE has provided in its final report offer many opportunities for Milwaukee County to become a better property manager. The recommendations are numerous and varied, which requires a multi-disciplinary approach to analyzing the recommendations for future implementation.

To that end, the Department of Administrative Services (DAS) would like to establish a Comprehensive Facilities Plan Workgroup (Workgroup) that would include members from the Office of the Comptroller, County Board staff, DAS – Facilities Management and DAS – Fiscal. The Workgroup would be tasked with developing short term, mid-term and long term projects for implementation, based on the CBRE report. The Workgroup would then present its recommendations to the Comptroller, County Executive and County Board for approval.

It is envisioned that the Workgroup would commence as soon as practicable and will report back with a timeframe for making recommendations.

Cc: County Executive Chris Abele
Amber Moreen, Chief of Staff, County Executive's Office
Scott Manske, Milwaukee County Comptroller
Don Tyler, Director, Department of Administrative Services
Craig Kammholz, Fiscal and Budget Administrator
Kelly Bablitch, Chief of Staff, County Board
Jim Burton, Director, Facilities Management Division
Greg High, Director, Architectural & Engineering Services Section
Greg Waszak, Facilities Maintenance Manager

CBRE PRESENTS A FINAL REPORT

COMPREHENSIVE FACILITIES PLAN CONSULTING REPORT

Prepared for:
Milwaukee County



February 11, 2013

Presented by:

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Submitted to:

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This letter/proposal is intended solely as a preliminary expression of general intentions and is to be used for discussion purposes only. The parties intend that neither shall have any contractual obligations to the other with respect to the matters referred herein unless and until a definitive agreement has been fully executed and delivered by the parties. The parties agree that this letter/proposal is not intended to create any agreement or obligation by either party to negotiate a definitive lease/purchase and sale agreement and imposes no duty whatsoever on either party to continue negotiations, including without limitation any obligation to negotiate in good faith or in any way other than at arm's length. Prior to delivery of a definitive executed agreement, and without any liability to the other party, either party may (1) propose different terms from those summarized herein, (2) enter into negotiations with other parties and/or (3) unilaterally terminate all negotiations with the other party hereto.



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February 11, 2013

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Re: Comprehensive Facilities Plan

Dear Mr. Burton:

On behalf of CBRE, we are pleased to present this Comprehensive Facilities Plan Consulting Report per the professional services agreement between Milwaukee County and CBRE, for the development of a comprehensive facilities plan for Milwaukee County. This Report considers a broad spectrum of opportunities that will enhance the performance of the property portfolio and the departments and personnel responsible for the management of the County's real estate.

The plan goes beyond traditional opportunities to reduce cost by examining existing processes, departmental structures and operational needs that impact the County's ability to perform at a high level - particularly as it does so in the current budget constrained, economic climate.

We believe that if some or all of these recommendations are embraced by the county, significant efficiencies will be realized — the county will reduce its overall costs and departmental, employee and customer needs will be better served.

This optimization plan is designed to be a living document and should be updated on an ongoing basis. Thank you for the opportunity to partner with Milwaukee County.

Sincerely,

A handwritten signature in black ink, appearing to read "T. Michael Parker", with a stylized flourish at the end.

T. Michael Parker
Senior Vice President
Global Corporate Services





PREFACE

Glossary of Terms

The following terms are used in the report. The following definitions are provided for clarity of recommendations and ideas contained in this document.

- **Capital Redeployment** – Reallocating money used for operating and capital expenses on underutilized and non-Mission Critical assets that can be sold, to long term hold properties
- **CBRE** – CB Richard Ellis, is the prime contractor for this report. CBRE Group, Inc. (NYSE:CBG), a Fortune 500 and S&P 500 company headquartered in Los Angeles, is the world’s largest commercial real estate services firm (in terms of revenue). The Company has approximately 34,000 employees and serves real estate owners, investors and occupiers through more than 300 offices worldwide.
- **Collocation** – The act of bringing together staff and departmental functions into a common facility or space to enhance collaboration and reduce occupancy cost.
- **Consolidated or centralized real estate department** – As used in this report, the consolidation of all real estate functions including facilities, architectural and engineering, real estate accounting, acquisitions, dispositions, assessment and leasing, under one department
- **Core Campus** – The primary County properties located in the downtown area including: Courthouse, Safety Building, Criminal Justice Facility, Community Correctional Center, Medical Examiner’s Office and the Marcia Coggs Center
- **Cost Avoidance** – Avoiding the expenditure of budgeted real estate expenses for properties that are vacated and sold. This releases dollars that can be spent on other properties and projects. This category also includes increasing the utilization of existing properties to limit the increase of occupied space and avoid additional occupancy cost.
- **Landlord** – Where the phrase “centralize all real estate functions under one County Landlord” is used, we are referring to the aggregation of all activities related to the occupancy of County owned properties under one department that acts as the responsible party for all real estate.
- **Key Performance Indicators (KPIs)** – Metrics used to benchmark operating performance of buildings, staff, processes and departments over time. See sample metrics in Appendix D.
- **Mission Critical** – Refers to buildings that are essential to the delivery of County services. They should receive the highest priority for capital funding due to their primary role in County government.
- **Out-sourcing vs. Out-tasking** – Out-tasking is engaging the services of a 3rd party service provider on an “as needed” basis for specific tasks. Outsourcing is a partnering relationship with a 3rd party firm to provide frequent and ongoing management and execution of services. This could be in an advisory role or providing hands-on services such as repairs and maintenance.
- **Property Portfolio** – The entire portfolio of County properties – roughly 13.8 MSF and 1,000 buildings
- **Real Estate Management** – In the context of this report, “real estate management” refers to the holistic management of County property including facilities operations, architectural and engineering, real estate accounting, acquisitions, dispositions, assessment, sustainability and leasing functions.
- **Shadow Space** - Space currently occupied by departments that is underutilized (high SF per person metrics) and therefore contains excess underutilized or “shadow” space. Also, common space used for training, storage, files, circulation, etc. that is seldom used or could be used for office occupancy could be shadow space.



Executive Summary

EXECUTIVE SUMMARY

Primary recommendations



Executive Summary

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Executive Summary

PRIMARY FINDINGS

Current Status

- Similar to many long-tenured public and private sector organizations, the management framework responsible for operating Milwaukee County properties has evolved into a dispersed multi-department structure, with multiple budgets, points of authority, contracts, staff and tracking systems.

Proposed Approach

- The management of the real estate portfolio requires a holistic approach that identifies properties critical to the delivery of County services.
- As outlined on the following pages, a focus on the most effective real estate management strategies for Mission Critical properties will optimize the use of facilities and capital.

1. *Stretching real estate services throughout a large portfolio of underutilized buildings has fostered incompatible uses, unnecessary expense, life safety issues, excessive maintenance and building degradation.*

Sell assets to reduce the footprint of occupied space

Benefits

- Generate sale proceeds to fund real estate capital projects
- Eliminate most “shadow” space
- Reduce utility and maintenance costs
- Reduce excess travel time between facilities
- Improve code compliance and life safety
- Focus on smaller pool of core assets to enhance staff productivity
- Redirect staff efforts to high return tasks and outcomes



Executive Summary

2. *Real estate management, costs and operations are tracked and handled by many decentralized departments.*

Consolidate all real estate functions under one County "Landlord"

- Reduce cost of occupancy
- Optimize current and future energy management
- Drive changes in workplace culture and management
- Improve staff productivity
- Implement uniform office standards
- Eliminate capital spending on obsolete facilities
- Enhance interface between County staff and constituents
- Partner with government entities for specialized space

Benefits

- Strengthen financial control and reduce operating cost
- Improve internal customer focus
- Foster more effective use of manpower – both internal and 3rd party vendors
- Upgrade systems, tools and processes for tracking tasks, maintenance and spending
- Measure services through surveys, customer feedback and data assessment
- Move the County from out-tasking to effective out-sourcing

Improve occupied space and optimize utilization

3. *Outdated space allocation, poor use of work areas and occupancy of obsolete high maintenance buildings have created an environment that does not respond to customer needs and is very expensive to operate.*



Executive Summary

4. *The current inability to track actual operating costs, use manpower effectively and keep up with aging and underfunded facilities, have exposed the County to life safety concerns, inefficient use of staff and ineffective allocation of resources.*

Develop systems and invest in training and tools

Benefits

- Track and reduce overall cost of occupancy+-
- Focus staff effectiveness on key properties and components
- Continually target problem facilities and life safety issues
- Improve ongoing property analyses to create a more efficient occupied space portfolio
- Permit consistent inventory control and reallocate funds
- Develop metrics to track success and reduce costs
- Focus spending on life safety, deferred maintenance and Mission Critical space needs
- Foster electronic paper filing and recover underutilized space for office occupancy



Executive Summary

5. *Milwaukee County can significantly reduce annual operating expenses and release funds for other projects that are now imbedded in underutilized, under-performing and unnecessary real estate.*

Reallocate available savings from real estate back into the portfolio

Benefits

- Reduce annual operating budgets in the range of \$2 – \$4 million per year
- Support reallocation of an estimated \$140 – \$250 million (a) to other Mission Critical assets
 - (a) Dollar estimates include 20 year anticipated spend for excess capital repairs, operating expenses and staff and also include the imbedded value of underperforming County real estate



Executive Summary

PORTFOLIO PROFILE

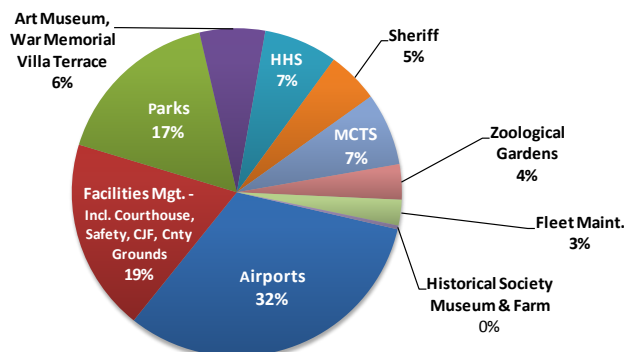
Portfolio Size

Consists of a wide variety of property types and uses including office, corrections, museums, airports and zoo and totaling approximately:

- 1,000 properties
- 13.8 million square feet

Source: Milwaukee County

Property Portfolio – Percent Occupied by Department

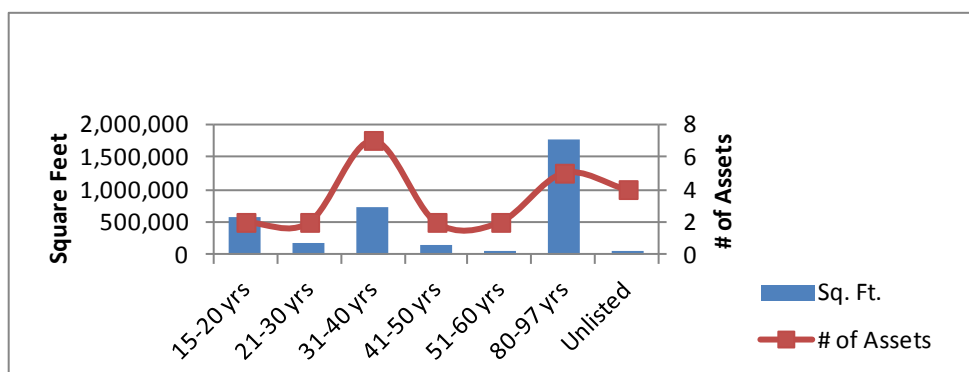


Portfolio Management

The Milwaukee County Portfolio (“the Portfolio”) of approximately 1,000 properties and 13.8 million square feet is occupied/controlled by numerous agencies (graph above). While the Facilities Management group provides services to some of the other departments, large entities such as the Airports and Parks Departments handle most of their own real estate operations requirements.

The Age of Assets graph below illustrates that over 75% of the portfolio is over 30 years old. The large amount of old facilities requires an ongoing commitment to capital improvements to keep buildings operational.

Age of Real Estate Portfolio Assets



Facilities Plan Approach

The Milwaukee County Portfolio (“the Portfolio”) assessment is based on a multi-faceted approach that included a physical property inspection of key properties (25 walk-throughs), an operations assessment of current real estate practices, an operating expense review and a strategic analysis of options based on the information gathered and interviews with key stakeholders. The space surveyed includes over 50% of the non-special use space (over 3.6M SF; excludes museum, parks, jails, airports and zoo). It represents a variety of office, mental health/medical, food service, elderly services, judicial and administrative corrections space.

The following table and map identify the 25 primary properties that were inspected in greater detail.

Asset ID	Site Name	Asset Name	Address	Square Feet
76	Courthouse Complex	Criminal Justice Facility	949 N. 9th Street	475,000
10	Courthouse Complex	Courthouse	901 N. 9th Street	1,021,000
30	Courthouse Complex	Safety Building	821 W. State Street	296,000
35	Community Correction	Community Correctional Center	1004 N. 10th Street	75,544
37	Community Correction	Medical Examiner	1004 N. 10th Street	73,830
1435	McGovern Park	McGovern Park Senior Center	5400 N 51st Blvd.	12,983
1830	Rose Park	Rose Park Senior Center	3045 N. MLK Drive	39,474
1990	Washington Park	Washington Park Senior Center	4420 W. Vliet Street	30,092
2680	Underwood Parkway	Wil-O-Way "U" Recreation Center	10602 W. Underwood Creek Parkway	8,975
2681	Underwood Parkway	Wil-O-Way "U" Wading Pool	10602 W. Underwood Creek Parkway	1,808
2950	Grant Park	Wil-O-Way "G" Recreation Center South	207 S. Lake Drive	10,509
3125	Warnimont Park	Kelly Nutrition Building	5400 S. Lake Drive	4,290
3130	Warnimont Park	Kelly Senior Center	5400 S. Lake Drive	10,300
3845	Wilson Park	Wilson Park Senior Center	2601 W. Howard Avenue	38,458
5000	Children's Court	Vel Phillips Juvenile Justice Center	10201 Watertown Plank Road	219,539
5040	Mke. Regional Medical Center	D-16 Mental Health Center	9455 Watertown Plank Road	425,400
5060	Mke. Regional Medical Center	D-18 Food Service building	9150 Watertown Plank Road	35,028
5070	Mke. Regional Medical Center	D-19 Day Hospital	9201 Watertown Plank Road	129,433
5080	Mke. Regional Medical Center	D-20 Child and Adolescent Treatment Ctr	9501 Watertown Plank Road	182,787
5290	Research Park	M-01 Technology Innovation Center	10437 Innovation Drive	137,247
5600	Marcia Coggs Human Services	Marcia P. Coggs Human Service Center	1220 W. Vliet Street	222,482
5605	City Campus	City Campus Office Complex 9 Story	2711 W. Wells Street	129,989
5605	City Campus	City Campus Office 5 Story	2711 W. Wells Street	28,025
	City Campus	27th Street Store Front		19,366
	City Campus	Theater		9,116
Total Square Footage				3,636,675

PROPERTIES

1. Criminal Justice Facility
2. Courthouse
3. Safety Building
4. Community Correctional Center
5. Medical Examiner
6. McGovern Park Senior Center
7. Rose Park Senior Center
8. Washington Park Senior Center
9. Wil-O-Way "U" Recreation Center
10. Wil-O-Way "U" Wading Pool
11. Wil-O-Way "U" Recreation Center South
12. Kelly Nutrition Building
13. Kelly Senior Center
14. Wilson Park Senior Center
15. D-16 Mental Health Center
16. D-18 Food Service building
17. D-19 Day Hospital
18. D-20 Child and Adolescent Treatment Center
19. M-01 Technology Innovation Center
20. Marisa P. Coggs Human Service Center
21. City Campus Office Complex 9 Story
22. City Campus Office 5 Story
23. 27th Street Store Front
24. Theater
25. Phillips Juvenile Justice Center



Executive Summary

FACILITIES PLAN PARTICIPANTS

Primary participants involved in the completion of this study include:

Milwaukee County – Primary Participants	
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Milwaukee County Interviews	
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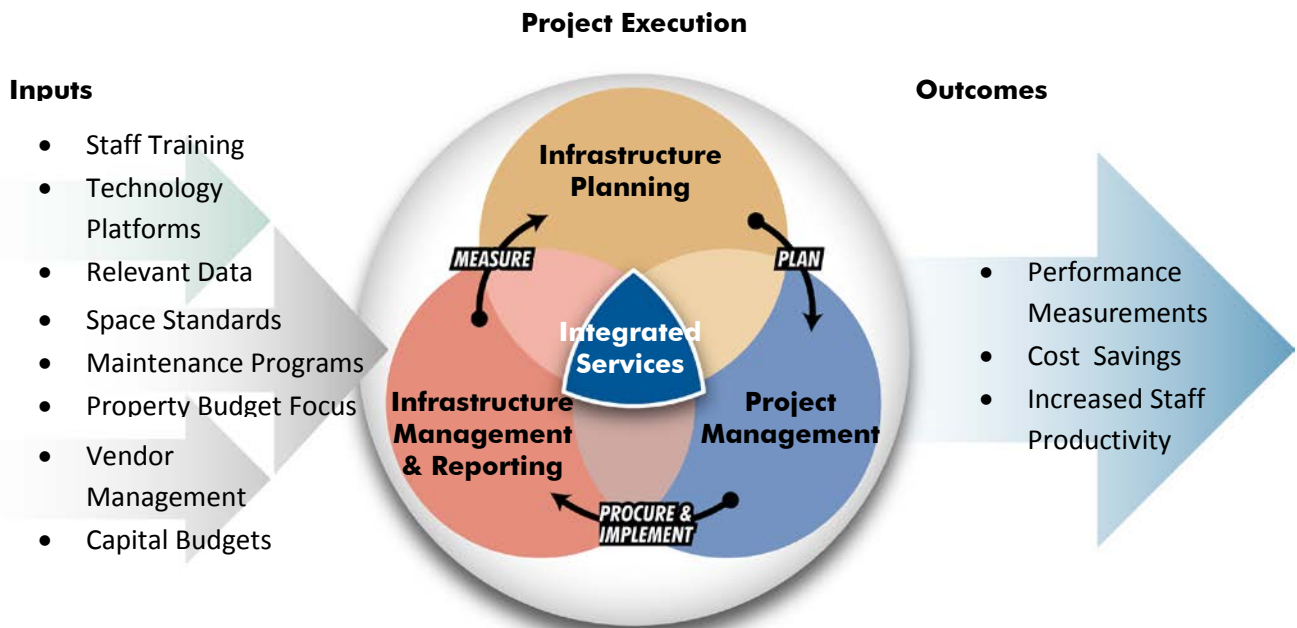


Executive Summary

ORGANIZATIONAL GOALS AND RECOMMENDATIONS

Milwaukee County (“MC” or “the County”) is in a position that requires it to make fundamental decisions concerning the management of its real estate portfolio. A difficult budget environment has driven many organizations to embrace the opportunity to create a customer-focused, highly efficient organization that unifies real estate service delivery while reducing overall portfolio costs. A comprehensive portfolio management system can address a spectrum of real estate-related activities and incorporate planning, implementation, and management functions. These competencies can be illustrated as a continuum, as indicated in the diagram below.

Integrated Services Platform Engagement Throughout the Real Estate Lifecycle



■ Create an enterprise-wide, best-in-class real estate organization.

Milwaukee County is well positioned to gain from, and expand upon, the experience of recognized real estate organizations and leading private and public sector corporations and institutions. The following report discusses the process redesign and cultural change that is necessary to transform the County’s existing real estate organization into a full-spectrum real estate services provider. This transformation will require a unified department structure, combined budgets, single points of authority, coordinated contracts, consolidated staffing and common tracking systems. As CBRE has noted, achieving these goals for the County requires a bold plan. This “organizational plan” is based on the following key goals:



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Reduce the Overall Footprint of Occupied Space

- **Reduction in underutilized space will create the largest dollar savings year-over-year**

While the County should continue to pursue efforts to reduce energy costs, operating expenses, space standards and other incremental initiatives to save money, the biggest dollar savings will come from closing inefficient and underutilized facilities with higher yearly operating expenses and unfunded capital improvement requirements.

- **Confirm the Highest and Best Use for all properties and dispose of assets that are no longer required to deliver services to the constituents of Milwaukee County**

In looking at the current use/utilization of selected facilities within this study, the CBRE Team has identified properties that are not being used to their Highest and Best Use and are not Mission Critical to the delivery of County services. Milwaukee County could realize an infusion of capital and add to the current tax base through the sale of assets that are underutilized, have high capital expense requirements and no longer serve the core mission of delivering County services. Owned facilities that remain in the portfolio could be improved to their Highest and Best Use and serve as sites for consolidation and collocation.

- **Create a centralized Core Campus around the current Courthouse**

The County should strive to consolidate the primary administration and court functions into the core properties that make up the Courthouse complex. We identify the Core County Campus (Core Campus) as the Courthouse, Safety Building, Criminal Justice Facility and the Medical Examiner/Community Corrections Center site. Previous studies for both the Courthouse and the Safety Building should be revisited and take into consideration revised space standards, alternative work strategies and electronic file storage. A consolidation into the Core Campus will reduce current square footage in underutilized satellite locations and greatly improve staff productivity.

- **Savings from space reduction should be put into deferred maintenance to reduce larger future repair bills and reduce safety issues in buildings**

Limited capital has forced the deferral of maintenance in many buildings across the portfolio. The sale of underutilized facilities can eliminate operating expenses and free up dollars slated for capital improvements that can be spent on Mission Critical facilities that remain.

Consolidate the Real Estate Management Function in the Department of Administrative Services

The centralization of authority over staffing, purchasing, space standards, performance measurement and staffing is critical to the success of improving overall management, maintenance and savings in real estate.

- **Integrate and strengthen all portfolio management authority**

If the County is to achieve cost and space reduction goals through collocation and other means as outlined in this report, it will have to unify service delivery and control resource allocations (space) within a department that encompasses many of the functions required to manage real estate such as the Department of Administrative Services (DAS) which includes facilities, IT and accounting functions.



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■ Establish the Department of Administrative Services as the landlord for all agencies

Control of resources is essential to achieving enterprise-wide space and cost reductions. DAS should assume the role of “landlord” for all agencies, functioning as master lessee and signing leases on behalf of departments which will execute occupancy agreements with DAS. This consolidated real estate management and leasing authority will simplify budgeting and cost allocation, an issue that is particularly important in collocation scenarios.

■ Adopt a customer service focus.

Fundamental in the transformation to portfolio management will be the adoption of a high-quality customer service focus that satisfies agency needs through the delivery of quality space and services, while simultaneously reducing occupancy costs. “Customer service” means that the real estate organization will provide what is needed to operate according to established service-level standards, rather than comply with every customer request.

■ Reinforce department integration throughout real estate processes

By adopting a customer service focus that values collaboration, facilitation, and joint problem-solving, department interests will be served even as responsibility for real estate shifts from departments to DAS. Department staffing plans can be modified, as real estate-related responsibility in departments is diminished through attrition and/or reassignment and DAS assumes all portfolio management responsibility.

■ Implement a Shared Services Model for oversight and management of its real estate portfolio

Duplication of effort and redundant resources can be eliminated via a consolidation of human resources. Processes drive efficiency which drives savings - the second benefit of Shared Services. Positive outcomes of Shared Services models include: economies of scale, centers of expertise, data management and analytics, best practices and customer service. However, in order to drive process standardization and efficiency, the County must 1) Set up and utilize technology platforms to achieve desired results, 2) foster cultural change and employee adjustment to transform the organization from a decentralized model to a shared services model and 3) facilitate constant communication with a robust change management program.

Workplace Space Optimization to Improve Utilization

■ Evaluate how Milwaukee County staff works and utilizes space on a day-to-day basis

Traditional concepts of providing a permanent designated desk to every employee are being replaced in both public and private sector organizations by a more flexible concept of shared spaces, teleworking and mobile work initiatives. The creative response to these strategies including work-at-home, mobile work and collaborative work is saving organizations millions of dollars in occupancy costs.

■ Reduce the square footage allocations for offices and workstations in response to electronic work processes

The amount of space required to perform functions in an increasingly paperless environment is much less than previously allocated. As organizations streamline processes, printing, communications and performance tracking, the need for paper, forms and reports in workspaces has been greatly reduced.



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■ **Make electronic file storage a primary funding priority**

The scanning and filing of documents electronically will free up large amounts of space currently being used for paper storage in primary office areas. Any large quantities of historical paper files that must be maintained and do not require immediate access, should be moved to a secure, low cost warehouse.

Develop the Systems, Staff, Processes and Tools to Achieve Success and Measure Results

■ **Centralize the management, procedures, accounting and expense budgets to enable the efficient analysis and allocation of dollars by building, specific equipment, staffing and vendor.**

Established processes and training are required to enable staff to track expenses and identify opportunities for cost savings by property. More efficient tracking will help to identify problem buildings, failing equipment and high operating costs. The solution requires an expansion of current systems (VFA, emaint™), training to use current systems (accounting allocations) and in some areas new tools or procedures (could be IT software, process playbooks, handheld work order tracking, etc.).

■ **Implement a program to track, and analyze collected data on a periodic basis**

Year-over-year improvements will only be achieved when relevant data is collected and assessed on a routine basis. Key performance indicators (KPIs) need to be established and processes need to be developed to review and assess KPIs.

■ **Identify the skill sets and personnel required as the organization transforms to a more service and process oriented organization and provide the requisite training to leverage the skills of every employee**

Success will be achieved by building a staffing plan around the building portfolio taking into consideration the age, condition and types of equipment at each location and developing critical success factors and skills required to for each position. Make a commitment to provide ongoing training to enhance the “fit” of employees for positions that require a higher level of skills.

Create an internal “Experts Network” of employees that would become shared resources across all properties and whose primary objective would be adding value by promoting a consistent and uniform approach to the delivery of such services, and by sharing the organizational knowledge best practices and overall service experience among the buildings and across the department.

Reallocate Available Savings From Real Estate Back into the Portfolio

■ **Initial savings estimates identified roughly \$140 million in savings over a 20 year planning period for a relatively small portion of the portfolio – we believe it could reach \$250 million across the portfolio.**

We believe initial savings estimates are a down payment from the implementation of a more aggressive portfolio-wide strategy. Identified savings include the sale of a few selected assets, the net savings from more efficient occupancy in core buildings, better staff utilization in selected locations and a reduction in capital outlays for a small segment of the portfolio. Additional opportunities for savings include building upgrades to reduce energy costs, reduced staff travel time, leveraged infrastructure cost savings across a smaller footprint, shared cost arrangements with other levels of government and other incremental initiatives to save money identified in this report.



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PRIMARY REAL ESTATE STRATEGIES

Primary real estate strategies identified by the Real Estate Team include:

- Consolidations and Dispositions – All major locations have been reviewed to identify occupants that can be consolidated into core County-owned space and buildings that can be sold.
- Re-stacking of Occupied Space – An assessment of core County owned properties was completed to determine spaces that can be consolidated to free up excess space for other county tenants as opposed to staying in place in underutilized buildings.
- Co-Location – Co-location opportunities for all existing sites and new assignments have been identified.
- Operating Expense Reduction – Operating expenses can be reduced by disposing of underutilized buildings and improving the operating metrics for long-term hold space through facilities upgrades.

Proposed Scenarios

The primary driver of greater efficiency and cost saving involves a higher utilization of the primary space identified for continued occupancy by the County. CBRE believes the County should focus on the Core Campus properties in downtown Milwaukee.

- The CBRE Team believes that the Core Campus capacity can be greatly increased.
- Maximizing space utilization will improve staffing efficiencies for real estate management and core county functions such as the courts.
- Funding for strategy implementation can be derived in part from cost savings in operations, redirected capital expense dollars, staffing efficiencies and property sales.

Core County Campus

The Core Campus strategy has several primary recommendations:

- Identify core assets to retain, serve as consolidation locations, upgrade systems and maximize the utilization of the facilities.
- Revise space standards and alternative work strategies based on the recommendations contained in this report to maximize use of the space.





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- Utilize revised space standards to update the planning studies completed in 2002 for the Courthouse and in 1992/2008 for the Safety Building, to determine the best strategy and optimal capacity for these buildings. Space in the Criminal Justice Facility should be included in this assessment.
- Identify assets to be demolished and replaced or sold based on the findings of the core campus reuse study.

Property Strategies

Over the course of the Milwaukee County Facilities Study, CBRE has identified properties that are candidates for development or redevelopment and properties that could be sold.

- Potential for redevelopment: Courthouse (#10) and Safety Building (#30)
- Demolish and redevelop: Community Correctional Center (#35) and Medical Examiner Office (#37)
- Demolish, sell land or redevelop: Mental Health Center (#5040), Day Hospital (#5070), Food Service Building (#5060), Child and Adolescent Treatment Center (#5080) and Kelly Nutrition/ Senior Center (#3125 and #3130)
- Sell Assets: Technology Innovation Center (Asset ID #5290) and City Campus (#5605),
- Sale contingent on reuse planning for core campus: Marcia Cogg (#5600) and Juvenile Justice Center (#5000)

Asset-by-Asset Strategy

The following section summarizes the future strategy for primary properties reviewed for this study.

Medical Examiner and Community Correctional Center - 1004 N. 10th Street

- Total Building Size: 149,374 square feet; Low rise and six story sections
- Total Site Area: 1.64 acres (71,438 square feet)
- Built: Community Correctional Center (CCC) -1931/ Medical Examiner-1974
- Costs are not appropriately allocated to these facilities for the majority of general facility categories, however the utility costs are approximately 35% higher (nearly \$1.60/sf).
- Recommendation: Redevelop this site to serve future county occupancy needs. Both buildings are outdated and inefficient. Currently the CCC building is vacant and has no current value as-is. The Medical Examiner portion of the building is outdated and seemingly inadequate in terms of its use. The buildings should be razed and redeveloped into a higher and better real estate use.

Close and demolish the Medical Examiner's office and former Huber Community Correctional Center (former St. Anthony Hospital). Huber has been moved to Franklin, but that is not ideal. To capitalize on synergies, the Medical Examiner's functions may be combined with similar city and state labs and may be moved near the Regional Medical Center, especially the Medical College of Wisconsin. The remaining vacant parcel may be used for parking, court consolidation or related County functions or it could be sold. We recommend holding until details of Core Campus plan are finalized.



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Courthouse – 901 North 9th Street

- Total Building Size: 1,021,000 square feet
- Total Site Area: N/A
- Built: 1932
- Stories: 7
- Recommendation: Update previous plan for reuse of the existing building or site as this is a core asset. Utilize revised space planning standards to maximize the building footprint. Ramp up the electronic filing initiative to increase space for office occupancy. Backfill from City Campus and other locations.

Safety Building - 821 West State Street

- Total Building Size: 296,000 square feet
- Total Site Area: N/A
- Built: 1928
- Stories: 7
- Recommendation: Update the 1992 Safety Building Reuse Study to assess the feasibility of a full remodeling of the existing building or site, as this is a core asset. Utilize revised space planning standards to maximize the existing occupied areas and evaluate the feasibility of re-using the former jail space. Evaluate the proposed link addition highlighted in the 1992 Reuse Study to determine the feasibility of a full courts consolidation.

Marcia Coggs Human Services Center - 1220 West Vliet Street

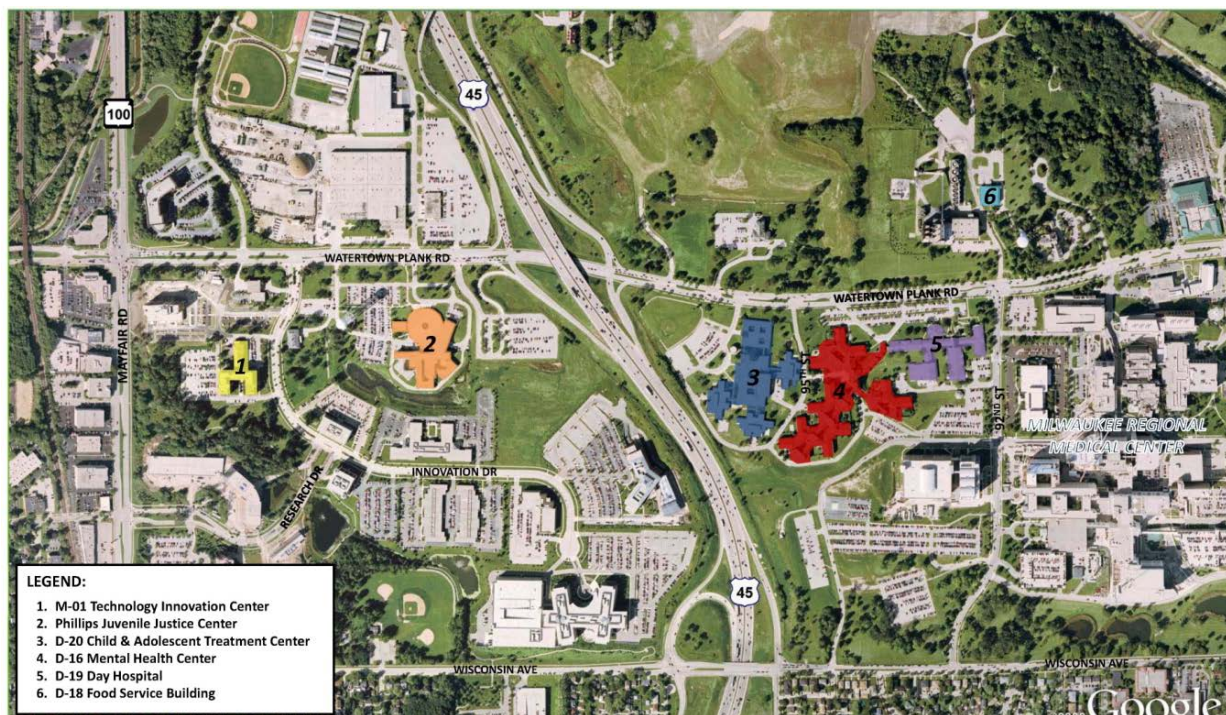
- Total Building Size: 222,482 square feet
- Total Site Area: N/A
- Built: 1920
- Stories: 3
- Recommendation: Update the Courthouse area planning for the Courthouse and Safety building to determine the overall capacity and need for office space. Utilize revised space planning standards to maximize the building footprint in the Courthouse plan. Based on that assessment use Marcia Coggs as follows:
 - If sufficient space can be found in the immediate Courthouse complex, approach the State to explore their interest in a possible purchase or negotiate a longer term lease with the State and then sell to a third party buyer.
 - Marcia Coggs sale value is dependent in part on the State of Wisconsin. A longer term lease signed by the State and/or County could increase its value in a sale to a third party buyer.
 - If additional space is needed to house staff from City Campus and other consolidation locations, increase capacity at the Marcia Coggs building using up-to-date workplace concepts and space standards, remodeling the basement or by renegotiating space needs with the State.



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Watertown Plank Road Area

Milwaukee County Watertown Plank Road Area Properties



Technology Innovation Center - 10437 Innovation Drive

- Total Building Size: 137,247 square feet
- Total Site Area: 6.27 acres (273,124 square feet)
- Built: 1915
- Stories: 5
- Utility costs also exceed \$2.20/sf which is high and inefficient. For comparative use facilities, costs should be closer to \$1.45-\$1.60/sf
- Recommendation: The County is currently subsidizing a new business incubator. Neither the building nor the county offer strategic advantages for these businesses. Other public and private groups in the market are offering similar business incubator space/services and could provide space for the current tenants. The current master lease with the County and existing rent flows do not appear to cover operating and capital needs. The building's deferred maintenance will require increased capital commitments in the next few years.

Based on huge capital improvement needs in the coming years (including a building steam line cut-off due to highway realignment) and the subsidy to the operation, it is recommended that the county sell this to a developer who can redevelop the site into a more effective use that would complement other nearby uses.



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Vel Phillips Juvenile Justice Center - 9455 Watertown Plank Road

- Total Building Size: 219,538 square feet
- Total Site Area: N/A
- Built: 1962; additions 1994
- Stories: 3
- Recommendation: Update the Courthouse area planning for the Courthouse and Safety building to determine the overall capacity and need for office space. Utilize revised space planning standards to maximize the building footprint in the Courthouse plan. Based on that assessment use the Juvenile Justice Center as follows:
 - If sufficient space can be found in the immediate Courthouse Complex (CC), move into remodeled space at the CC and sell to a 3rd party buyer.
 - If insufficient funds are available to execute a move strategy, repair deferred maintenance items.

Mental Health - 9455 Watertown Plank Road

- Total Building Size: 425,400 square feet
- Total Site Area: 18.9 acres (approximately 823,280 square feet)
- Built: 1978
- Stories: 2
- Utility costs exceed \$4.25/ft, extremely high and inefficient. For comparative use facilities, costs should be closer to \$3.00/sf.
- Recommendation: The sprawling County Mental Health facility is joined by the County Day Hospital and the Child & Adolescent Treatment Center. Together, the departments sit on roughly 46 acres adjacent to numerous medical facilities. The Mental Health Center, although functional is not fully compliant with current regulations and standards.

The New Behavioral Health Facility Study Committee Report (2011) previously recommended the completion of a 120-bed mental facility that could possibly be the beginning of a higher and best use scenario for a site.

“As this report points out in the information provided, pinpointing the exact size of a new hospital at this time is difficult, but the committee firmly believes that the current 280 bed facility is too large and is creating a model of care that is financially unsustainable. In order to better serve the needs of the clients, the committee recommends a significant downsizing of the county run facility and shifting emphasis to a less costly model of care in the community.”

Redevelopment options could include the development of a smaller facility on less land than the current building occupies. The remainder could be retained for future expansion for either the county or other compatible use. The County should sell the excess land to a compatible user.



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Child and Adolescent Treatment Center (CATC)

- Total Building Size: 182,787 square feet
- Total Site Area: 17.8 acres (approximately 775,300 square feet)
- Built: 1978
- Stories: 2
- Utility costs are above average.
- Recommendation: The sprawling Child & Adolescent Treatment Center is joined by the County Day Hospital and the County Mental Health facility. Together, the departments sit on roughly 46 acres adjacent to numerous medical facilities.

This facility should be evaluated in context of the overall County plan for Mental Health facilities including the adjacent Mental Health Center. We recommend exploring alternatives for current users (Wauwatosa Schools, UW Extension) of the facility and eventual sale of the complex.

Redevelopment options could include the development of a smaller Mental Health facility on less land than the current building occupies. The remainder could be retained for future expansion for either the county or other compatible use or sold to other 3rd parties.

Day Hospital - 9201 Watertown Plank Road

- Total Building Size: 129,433 square feet
- Total Site Area: 9.6 acres (approximately 418,200 square feet)
- Built: 1968
- Stories: 2
- Recommendation: The recommendation would be to phase this building in as part of a larger redevelopment of the overall Mental Health campus (46 acres). Many areas including the gym, bowling alley and pool are underutilized as program requirements of 3rd party contractors using the space have changed. A portion of the 46 acres could be used for a phased development that includes a new Mental Health facility.

Food Service Building - 9150 Watertown Plank Road

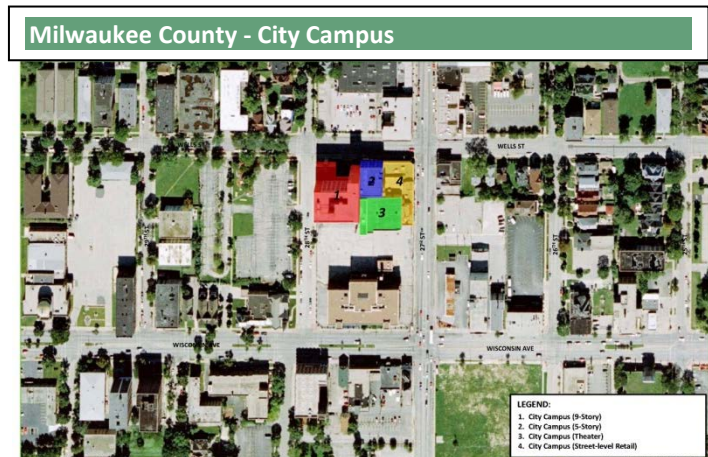
- Total Building Size: 35,028 square feet
- Total Site Area: 3.27 acres (142,441 square feet)
- Built: 1957
- Stories: 2
- Recommendation: Consolidate the service into an overall larger redevelopment of the Mental Health site across the street. Sell the current food service building and property to possibly UWM.



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City Campus - 2711 West Wells Street

- Total Building Size: 158,014 square feet – 9 story and 5 story structures
- Total Site Area: .58 acres (25,200 SF) approximate building coverage
- Built: 5 story – 1950s – early 1960s; 9 story – 1964 and 1973
- There are two county owned lots immediately west of the site across 28th Street (2805 W. Wells St. and 763 N. 28th St.) that are 1.69 AC and 0.74 AC respectively. They are used for parking.
- Total operating costs are high, exceeding \$7.75/sf, approximately 60% higher than a BOMA/IFMA comparative facility.
- Recommendation: Sell to buyer that would redevelop the site for a higher and best use based on input from the City of Milwaukee's Near West Plan. Currently, the space is extremely underutilized and outdated.
 - The current tenants that occupy the building could possibly be moved to the Marcia Coggs building at 1220 West Vliet Street or other consolidation locations.



City Campus - 2711 West Wells Street – Theater and Retail

- Total Building Size: Storefront retail: Approximately 11,200 SF; Theater: Approximately 10,000 SF
- Total Site Area: refer to approximate building areas
- Built: Early 1900's)
- Recommendation: Sell to buyer that would redevelop the theater and continue to rent out the retail

Kelly Nutrition and Senior Center - 5400 South Lake Drive

- Total Building Size: 14,590 square feet
- Total Site Area: 3.90 acres (170,070 square feet)
- Built: Senior Center-1954; Nutrition Building-1974
- There is insufficient information to compare total operating costs because there is a hybrid solution of shared responsibilities between County Facilities Group and the tenant, a non-governmental agency. As a smaller facility, this facility could easily be combined with other options.
- Recommendation: Based on the current building conditions and functionality it is recommended that this facility be razed to provide a better operating facility.
- Discussions with the Parks Department – the owner of the site – are required to identify alternative solutions for the property such as a consolidation of both the nutrition (food building) and the senior activity center with a possible a senior housing project.



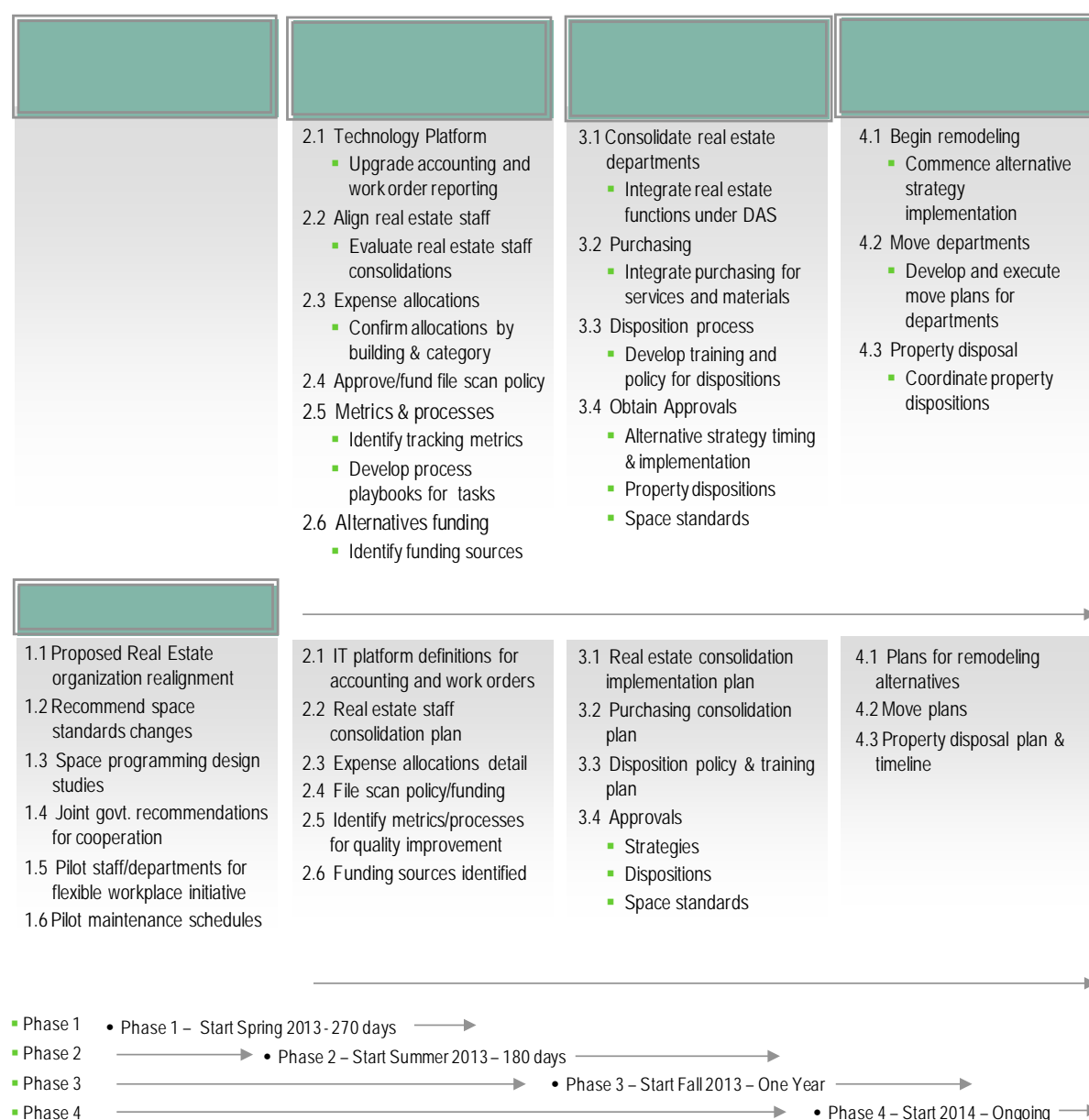
Executive Summary

RECOMMENDED NEXT STEPS TO EXECUTE THE REAL ESTATE STRATEGY

Project Phasing

The following project phasing and timeline provides an overview of the steps required and approximate timing to execute the recommendations in this report. A key component of project timing is the coordination with financing, particularly bond financing. With the exception of the possible construction of a new mental health facility, many of the recommendations contained within this report could be executed on an on-going basis over 5 to 7 years and be covered under the current annual bonding limit which is approximately \$35 million per year.

Phases for Implementation of Real Estate Strategy





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SUMMARY OF SQUARE FOOTAGE RECONCILIATION

Potential Availability for Consolidation

The CBRE Team recommends that Milwaukee County consider implementing a revised set of space standards (based on recommendations in this report). Those revised standards should be used to update the planning studies completed in 2002 for the Courthouse and in 1992/2008 for the Safety Building to determine the best strategy and optimal capacity for these buildings. Space in the Criminal Justice Facility should be included in this assessment.

Using revised numbers, the County should be able to assess the optimal configuration for its departments and determine if additional buildings can be consolidated. Our high level assessment would indicate that there is potential for space consolidations. Primary sources of consolidation space could come from the following properties:

Potential Available Space for Consolidation						
Building	Occupied Office Square Footage	Direct Space Available	Safety Bldg. Proposed Annex	Notes		
Core Campus Properties						
Courthouse	408,000	(1)	50,000	(4)	-	More square footage savings with building re-stacks and alternative work strategies implementation.
Criminal Justice	47,000	(2)	-	-	-	
Safety Building	180,000	(3)	185,000	(5)	130,000	
	635,000		235,000		130,000	
+ Direct/ Proposed Expansion	365,000					
	1,000,000					
Potential for Consolidation						
City Campus	77,000					Consolidation potential into Core Campus will require a programming study of Couthouse, Safety and Criminal Justice facilities.
Marcia Coggs	57,000					
	134,000	Office				
Children's Justice Center	219,000	Courts				Consolidation /into near Core Campus proposed New more efficient facility proposed by study committee
Mental Health Center	TBD					
(1) Assumes expansion into Mezzanine space. Additonal space recovery may be possible thru space standards downsizing						
(2) Estimate of occupied office space - 1st floor only. Additional SF may be obtained through more efficient use of existing space and other levels						
(3) Approximate occupied area from 2009 Safety Building Study. Additional space recovery may be possible thru space standards downsizing.						
(4) Estimated SF. Assumes expansion into Mezzanine space. Additional space recovery possible thru space standards downsizing.						
(5) Estimated SF from 1992 Safety Building study 2008 Safety Building update						
(6) Estimated SF from 1992 Safety Building study 2008 Safety Building update						



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FINANCING PROJECT IMPLEMENTATION

Summary of Capital for Redeployment

While the disposition of surplus sites will save money in the long run, the recommended planning and consolidation of space into existing buildings will require a financial plan that is workable and grounded in political reality. The remodeling of space to accommodate the moving and consolidating of departments will require up-front capital.

The CBRE Team has assembled a set of planning numbers that begin to identify capital available for redeployment. They include cost avoidance numbers that are dollars that can be redirected from capital projects for buildings that are sold. Savings from the remodeling of long-term hold buildings have been estimated. However, these numbers are very preliminary in nature and should be viewed as a down payment on the proposed plan contained in this report. We believe that as the County moves into plan implementation, additional savings can be identified and quantified.

Primary sources of capital can come from the following sources:

- Building sales identified in this report plus the sale of surplus assets not reviewed as part of this project. The CBRE Team believes that a dedicated effort to identify those assets that are Mission Critical to the delivery of County services will also uncover additional surplus properties that can be sold.
- Net savings in operating expenses over existing buildings – Included in following chart
- Overall operating expenses – The list below does not include a complete list of operating expense savings. We believe that additional savings can be identified when more detailed numbers become available and when energy savings from infrastructure improvement projects can be quantified.
- Expenditure of planned 5 year capital repair dollars on the remodeling of a smaller core portfolio of buildings.
- Life-cycle capital savings: Beyond the five year capital plans, the inspection of 25 properties for this report indicated a high level of deferred and preventative maintenance items that will require capital. Consolidating the portfolio will allow the county to re-allocate dollars to a smaller pool of properties.
- Real estate staff savings from the more efficient utilization of space
- Savings from centralizing and consolidating security functions – Fewer points of entry require less staffing and security equipment

Capital for Redeployment Identified

The following chart summarizes a very high level look at aggregate dollars that can be saved and redirected for use on the execution of the recommendations in this report. Initial savings estimates identified roughly \$142 million in savings over a 20 year planning period for a relatively small portion of the portfolio. We believe it could reach \$250 million across the portfolio.

- The capital redeployment estimates come from different sources and are meant to be planning numbers not absolute budget numbers
- Some of the proceeds are near-term such as property sales, while others are savings over a 20 year term
- Capital expense numbers reflect cost avoidance of capital dollars that can be directed toward other



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projects. Capital expense dollars also reflect estimates of ongoing capital requirements that need to be funded over a 20 year holding period – again, these are planning estimates not budget numbers.

- We believe the amount of identified capital available for redeployment will grow as the County begins to right-size the portfolio, consolidate real estate functions and track expenses in greater detail.
- The success of the proposed portfolio realignment is contingent on the redeployment of dollars saved, back into the remaining properties for upgrades that will save energy and reduce operational expenses. Capital dollars will be required to improve the utilization and operating performance of the Mission Critical properties that remain.

Summary of Potential Capital for Redeployment

Building	Staffing	20 Year Capital Expense - 5 Year Plan +15 Year Estimate (1)	Operating Expense Net Savings - 20 Year Aggregate (2)	Estimated Sale Proceeds (3)
Courthouse		N/A	\$12.9M	
Technology/Innovation Center		\$1.7M	\$6.7M	
City Campus		\$8.5M	\$3.4M	
Kelly Senior Center		\$.9M	\$.0M	
Marcia Coggs		<u>\$4.0M</u>	<u>\$6.0M</u>	
		\$15.2M	\$29.0M	
Medical Examiner/ Community Correction		\$1.3M	\$.0M	
Children's Justice Center (4)	\$2.7M	\$2.7M	\$.0M	
Mental Health Center (5)	\$13.0M	\$19.8M	\$30.8M	
Food Service	<u>\$.0M</u>	<u>\$.0M</u>	<u>\$.0M</u>	
	\$15.7M	\$23.8M	\$30.8M	
Subtotal Savings	\$15.7M	\$39.0M	\$59.8M	\$27.5M
Partial Summary of Capital for Redeployment	\$142.0M			
(1) Capital expense is aggregate sum of 5 year Milwaukee County projections + 15 year CBRE capital reserve estimate				
(2) Operating Expense net savings is CBRE estimate of savings if actions (operating or capital expense) were undertaken to reduce energy consumption (except Mental Health Center - see Note 5)				
(3) Estimated sale proceeds from selected asset sales - Depending on structure of specific sales, estimates may be higher				
(4) Staffing is estimate of security savings thru collocation				
(5) Mental Health estimates for Staffing and Operating Expense savings from "New Behavioral Health Facility Study Committee - Final Report" - 2011. In addition, operating expense savings includes 20 year net savings estimate from CBRE				

Intangible Savings

Intangible savings are more difficult to measure, but are real costs that should be included in the overall decision to move forward with projects. Intangible savings include:

- Staff efficiency: Less staff downtime traveling between spread-out buildings for meetings, property management and assigned job functions.
- Lower Travel Costs: Lower costs of operating County vehicles for travel between spread-out buildings for property management functions and assigned job functions.
- Lower building operational costs: Heating and cooling a smaller pool of highly efficient buildings



Executive Summary

(remodeling HVAC and exterior envelope components) is more cost effective than operating a larger pool of poorly maintained buildings with higher operating costs.

- **Building Connectivity and Production:** Most locations require monthly fees for data/voice connectivity, postal and office equipment.
- **Use of Existing Furniture:** Should the county move ahead with a lower set of space standards, costs may be reduced if existing furniture and workstations can be re-used. Existing workstation modules should be evaluated to determine if they can accommodate smaller sizes.
- **Alternative Work Strategies:** The higher the percentage of staff that can be accommodated by mobile work or work-at-home standards the lower the cost of occupancy. This is a key unknown metric at this time.
- **Shared Cost Agreements:** Increased levels of shared services with the State, City of Milwaukee, nearby hospitals and other related groups, will drive down real estate occupancy costs.
- **Timing:** The cost of financing and construction is at or near historic lows. As the economy recovers, these cost factors are expected to increase.

COST OF PROJECT IMPLEMENTATION

Cost Estimates

Detailed cost estimates for various projects are difficult to prepare as they require existing expense details, a program of specific needs and an understanding of all of the special design requirements of the space. As the County updates its program of requirements for Core Campus properties, information for the proper cost analysis of each project can be developed.

While detailed estimating is beyond the scope of this assignment, we have prepared summary cost estimates for the renovation of core office space for consolidation projects.

- **Remodeling 2nd Generation Office Space** including design, network, security, move and new furniture costs, but without major construction: \$40 to \$50 per square foot and \$20 to \$25 per square foot using existing furniture
- **Remodeling 2nd Generation Office Space** including construction, design, network, security, move and new furniture costs: \$100 to \$125 per square foot
- **Remodeling 1st Generation Alternative Use Space (raw space)** including construction, design, network, security, move and new furniture costs: \$150 to \$250 per square foot
- **Upgrades to mechanical, plumbing and HVAC systems** to increase capacity may be required in core areas and would typically be included in the estimates above, but unique situations may add to costs.
- **Parking** – Additional parking (lot/garage) will be required if the utilization of the Core Campus is increased

Additional Costs Not Included In this Analysis

Additional costs to execute this strategy have not been quantified. These include the hiring of consultants for planning and design studies. Engineering studies may be required to identify ways to improve HVAC, electrical, plumbing and life safety components of selected buildings. In addition, the County may be required to perform remediation or demolition work to improve the marketability of selected properties.



Executive Summary

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Operations Assessment

OPERATIONS ASSESSMENT OVERVIEW

Operations Assessment reviews all of the operational factors that impact the County's occupancy of space.



Operations Assessment

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Operations Assessment

OPERATIONS MANAGEMENT OVERVIEW

Operations Assessment Approach

The following section considers a variety of elements/factors that impact how Milwaukee County occupies facilities. They include:

- Organization & Process
- Portfolio Alignment Strategies
- Facilities Management
- Operating Expenses
- Project/Construction Management
- Workplace Solutions
- Market Opportunities
- Energy and Sustainability

Each of the various sections describes problem areas or opportunities for improvement within the real estate portfolio. "Current" depicts the current market conditions or opportunities to improve performance.

- "Strategy" describes those tactical events that should be undertaken to fully capitalize on the opportunity.
- "Benefits" describes the financial or operation improvement that is to be gained from implementing the strategy.
- "Primary" and "Secondary Initiatives" prioritize the impact of the recommendation. Simply put – Primary Initiatives ought to be undertaken immediately because the financial or operational improvement will have a substantial impact in the short to medium term. Secondary Initiatives should be undertaken once the Primary Initiatives are under way or have already been achieved.

PRIMARY ORGANIZATION AND PROCESS RECOMMENDATIONS

Current Status

Currently, real estate management, costs and functions are decentralized and handled by many different departments and tracked using a variety of methods. The current structure has grown out of decisions made over time that have reinforced the decentralized structure that is currently in-place. The following chart highlights primary organization and process issues that currently impact the management, cost and utilization of the real estate portfolio.



Operations Assessment

Organization and Process Summary

Current Status	Observations/ Recommendation	Change Management Benefits
<ul style="list-style-type: none"> Decentralized facilities management 	<ul style="list-style-type: none"> Real estate functions are split between DAS, Parks, museums, the zoo, courts, corrections and the airport All real estate & facilities management functions should be centralized 	<ul style="list-style-type: none"> More efficient staffing levels Better maintenance tracking Inventory management controls Expense management by asset
<ul style="list-style-type: none"> Decentralized financial management of real estate functions 	<ul style="list-style-type: none"> Accounting for real estate activities does not enable appropriate cost allocation Cost codes should be assessed and staff trained to properly allocate costs 	<ul style="list-style-type: none"> Ability to track costs by building to better assess cost of occupancy Cost allocations lead accountability and a focus on potential savings
<ul style="list-style-type: none"> Decentralized purchasing across real estate functions 	<ul style="list-style-type: none"> MC has formed a procurement department, but not all is centralized. Real estate contracts and purchasing should be centralized. 	<ul style="list-style-type: none"> Improved pricing, Better vendor coordination Improved service levels both internal and 3rd party
<ul style="list-style-type: none"> Overlapping functions and services are provided by multiple levels of government 	<ul style="list-style-type: none"> MC should share and partner resources and facilities with other government entities where feasible 	<ul style="list-style-type: none"> Will lower overall real estate spend Eliminate redundant facilities More efficient delivery of services
<ul style="list-style-type: none"> Minimal staff training, manuals and processes to develop new skills and improve services 	<ul style="list-style-type: none"> Staff training should be implemented across all levels of real estate personnel Develop processes for continual improvement 	<ul style="list-style-type: none"> Increased productivity Creates career path for employees Improved processes, safety & maintenance
<ul style="list-style-type: none"> Lack of integrated technology platform 	<ul style="list-style-type: none"> IT solutions should be upgraded to track properties, maintenance and spending Currently upgrading VFA and using eMaint™ but not to full capabilities 	<ul style="list-style-type: none"> Enhanced tracking improves accountability for expenditures Enables better strategic planning and sourcing Reduces administration/accounting time
<ul style="list-style-type: none"> Lack of methods and metrics for measuring improved performance 	<ul style="list-style-type: none"> Develop key performance indicators and methods to track progress and measure improvements 	<ul style="list-style-type: none"> Tracks progress toward meeting goals to reduce costs Improves quality of completed tasks
<ul style="list-style-type: none"> Increasing need for stored files has placed many cabinets in space that could be used for County functions 	<ul style="list-style-type: none"> A committee has been formed to advise on file policies and some funding has been provided to store electronic files An accelerated top down mandate with adequate funding to move files to electronic format needs to be initiated 	<ul style="list-style-type: none"> Makes space available to house programs and people in core buildings Faster access to stored files Cost savings on printing and paper



Operations Assessment

Primary Initiatives

Management

- Restructure and centralize all real estate functions to improve operating efficiencies, control costs and streamline job functions
 - Identify and evaluate all personnel involved in the management, operations, acquisition, disposition, repairs and financial tracking of real estate
 - Integrate HR, IT and real estate planning and organization to better coordinate headcount projections with space planning need.
 - Timing: Medium term
 - Cost: Low
- Financial management of real estate should be consolidated under one management structure
 - Centralized management and control of all real estate income and expenses will lead to greater accountability and more effective budgeting of dollars spent
 - Will require staff training and systems integration
 - Timing: Medium term
 - Cost: Low
- Develop and implement an effective “3rd partner” strategy to provide specialized services to the County for functions that are not provided internally
 - Evaluate the level of partnered functions today
 - Timing: Near term
 - Cost: Low
- Develop and implement an effective “inter-government partner” strategy to provide specialized services to the County for functions that are provided across other state and local government entities
 - Potential collaborations
 - Medical Examiner’s Office with City and State crime labs and Medical College of Wisconsin
 - County Mental Health facilities with Medical College of Wisconsin
 - Milwaukee County Water District with Wauwatosa and Milwaukee Metropolitan Sewer Districts
 - Timing: Near term
 - Cost: High – Replacement facilities and move costs

Training

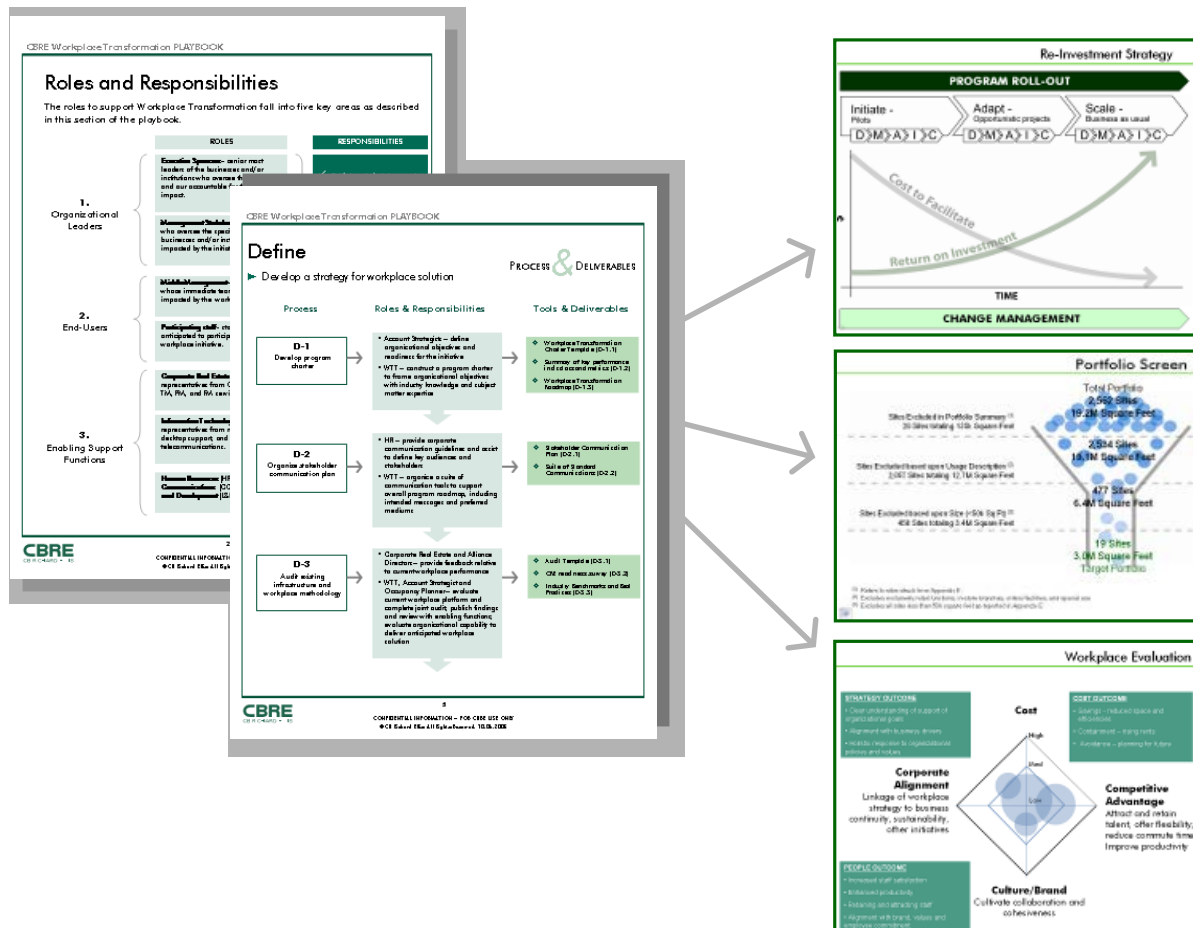
- Develop and maintain ongoing training program to expedite and reinforce change management recommendations and accelerate savings
 - Ongoing staff is required to upgrade staff skills to enable the use of new tools and technologies
 - Timing: Near term
 - Cost: Low



Operations Assessment

- Develop/improve operations manuals for each real estate function (in house and contract service provider)
 - Operations manuals are required to standardize processes
 - Timing: Near term
 - Cost: Low

Sample Playbook Operations Manuals



Process

- Establish Key Performance Indicators (KPI's) to measure performance of the Real Estate team, building systems and effectiveness of capital spending (See Appendix D for Sample Portfolio Metrics).
 - KPI's will enable the County to measure results year-over-year
 - Timing: Near term
 - Cost: Low



Operations Assessment

- Identify and implement methods for monitoring continual improvement processes with real estate team
 - Validate required processes and develop methods for periodic measurements
 - Timing: Near term
 - Cost: Low
- Implement annual strategic real estate planning review and recommendations report
 - Timing: Near term
 - Cost: Low

Technology

- Establish and build an integrated Technology Platform to support efficient and effective real estate decisions, maintenance tracking and expense reporting
 - Evaluate existing IT resources currently in use and identify gaps
 - Timing: Medium term
 - Cost: Medium
- Implement Electronic Document Management to remove large file storage areas from active office floors and re-purpose space for department use
 - Implement guidelines for document management and work to reduce large dedicated file areas
 - Identify resources required to expedite document scanning process
 - Timing: Medium term
 - Cost: High

Secondary Initiatives

Management

- Develop and implement employee recognition program
 - Timing: Near term
 - Cost: Low
- Integrate Human Resources (HR), Technology (IT) and real estate planning to better coordinate headcount projections and space planning requirements
 - Timing: Medium term
 - Cost: Low

Training

- Develop and Host “Best Practice” workshops for the Real Estate Team
 - Timing: Near term
 - Cost: Low



Operations Assessment

- Implement a Conflict of Interest Management program
 - Timing: Near term
 - Cost: Low

Structuring a High Performing Real Estate Organization

The structure of a high performance real estate group requires the identification of key attributes that have been used successfully in other organizations. The following list outlines primary attributes that reinforce the identified change management goals and enable the organization to achieve a successful transformation.

Key Attributes of a High-Performing Real Estate Organization

- Centralized control and decision making
- Effective leadership and deep skills within the real estate organization
- Operational excellence as a primary goal of the real estate operations
- Alignment with agencies and departments
- Strategic alignment with markets: real estate, capital, supply-chain
- Strong governance model for both internal and outsourced services and requirements

Evolution of Real Estate Organization



The following chart shows the current evolution of many organizations similar to Milwaukee County that are changing the structure and function of their real estate group to achieve a management model that is more strategic and better aligned with the needs of agencies and taxpayers.

- The County's Department of Administrative Services is currently between the first and second generation structures noted on the following chart.
- The evolution and advancement across structures to better support county government is highly dependent upon the support of executive leadership. If this support is not given – then the natural pull is back towards a first generation reactive strategy which does not allow for innovation or timely results.



Operations Assessment

Typical Evolution of Real Estate Management Structures

Management Structures	First Generation	Second Generation	Third Generation	Fourth Generation
Strategy	• Reactive	• Increasing focus	• Established discipline	• Integrated/evolving with business
People & Organization	• Heavily insourced • Focus on early adopters	• “Core competency” concept • Functional silo outsourcing • Heavy functional shadowing	• Integrated outsourcing • Eliminate the shadows • Variable resource models	• Global integrated outsourcing • “Just in time” expertise • Leadership
Partnership	• Large Real Estate function • Reactive/order taking • Inconsistent use of suppliers	• Smaller Real Estate function • Out-tasking • 1st tier preferred suppliers	• Smaller Real Estate function • 1st tier alliance partnerships • 2nd tier suppliers	• Strategic Real Estate function • One strategic integrated partner • 2nd tier delivery partners
Process	• Ad hoc, inconsistent process across multiple locations	• Process documentation and codification	• The drive for consistency • Portfolio-wide	• Multi-disciplinary program management, even across business functions
Systems & Technology	• Ad hoc implementation	• Focus on key functions (e.g. lease administration)	• Standardization; integration • Reporting • Point solutions	• The promise of breakthrough efficiency through enabling technologies
Performance Measurement	• Ad hoc	• Functional Key Performance Indicators	• Measure what matters • Benchmarking	• Total outcome Key Performance Indicators
Typical Operation Model				
Pros	• Client control • Functional Excellence	• Improved unit pricing • Best-in-class • Specific service	• Improving consistency • Supplier accountability	• Cross function/ geo-integration • Removes redundant infrastructure • Staff productivity enhancement • Improved utilization
Cons	• Inconsistent • Silos • Duplication	• Hard to manage • Transitional silos • Added management	• Supplier silos • Multiple data set	• Complex to govern

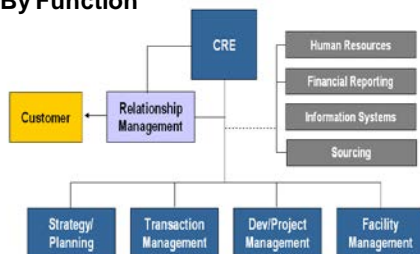
Key: S: Supplier; PS: Preferred supplier ; A: Alliance partner

Organizational Design Model

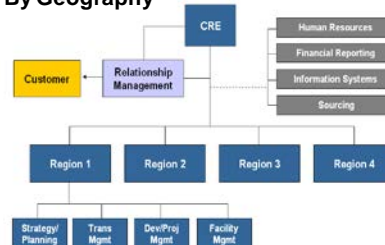
While there is no “one size fits all” model for a centralized real estate organization, two relevant models are 1) Functional Organization and 2) Geographical Organization. They have different strengths, weaknesses and uses.

Sample Organization Models

By Function



By Geography





Operations Assessment

Functional Organization

- Benefits
 - Most efficient organizational structure (least amount of management duplication)
- Challenges
 - More difficult to manage unique Agency/Department needs, diverse property types and large/ diverse geographies
 - Difficult to coordinate and deliver services across functions (e.g., Transaction, Project and Facilities Management)
- Common Application
 - Most often used in organizations with concentrated portfolios, homogenous property types, and/or service delivery requirements
 - Often used as a secondary organizational axis for organizational with geographic or operational unit structures
 - Can be used with geographically disperses portfolios or diverse property types only with complete centralization of CRE (Centralized Real Estate) control

Geographic Organization

- Benefits
 - Enables management of services across functions within a specific region
 - Reduces total travel and increases managers' knowledge of portfolio
- Weaknesses
 - More difficult to manage unique agency/department needs or diverse property types
 - Less efficient if Functional organizations are replicated in each region (duplicate management and inconsistent processes)
- Common Application
 - Most often used in organizations with geographically disparate portfolios, often requiring knowledge of local laws and customs
 - Within each region, Centralized Real Estate groups typically deliver services using a functional model
 - Customer Relationship Managers are also sometimes used within (or across) regions to align with business unit needs

Benefits to Organizational Design Models

Organizational models do not limit desirable platform elements

- Core service delivery elements such as Transaction, Project and Facilities Management are aligned with organization models
- Scalable elements are enhanced through a centralized approach
 - Information management



Operations Assessment

- Portfolio planning
- Relationship management
- Strategic sourcing
- Performance measurement
- Workplace programs
- Best practices are reinforced through the use of organizational models.

Recommendation

CBRE recommends the development of a functional design model with an imbedded geographic organization under functional areas, to accommodate field services in multiple locations.

- Customer Relationship Management (CRM): Aligns the Real Estate group with departments
- Strategy: Provides proactive solutions and innovation (portfolio, market, organizational)
- Centers of Excellence: Provides technology, process consistency and best practices across organizational boundaries
- Program Management Office (PMO): Integrates service delivery from project inception through operations
- **Recommendation: CBRE recommends the development of a functional design model with an imbedded geographic organization under functional areas, to accommodate field services in multiple locations.**

Organization Integration

Integration Levels

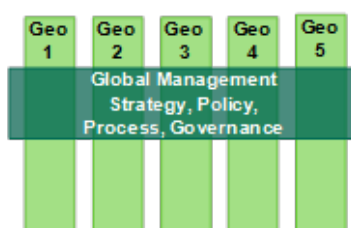
- Integration: Often used but least defined word in real estate
- There are many levels of integration
- Integration focus depends on the intent and maturity of the CRE organization, but what is the desired solution?

Types of Organizational Integration

Strategic Integration



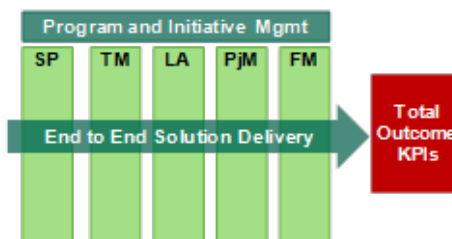
Geographic Integration



Process Integration (Function, Asset)



Performance Integration





Operations Assessment

Integrated Platform Development Steps

Development Steps Defined

The following outlines the required dimensional steps and transformational changes required to move the current real estate organization to an integrated platform.

Organization Development Steps Overview

Dimension	From	To	Benefits
1. Geographic Integration/ Centralized Decision Making	<ul style="list-style-type: none"> Departments in organizational silos with minimal centralized governance 	<p>Where centralized management is the adopted, model, real estate moves to:</p> <ul style="list-style-type: none"> Centralized model Where appropriate, centralized data/systems, processes, approvals, controls, reporting, initiatives Some local aspects may remain 	<ul style="list-style-type: none"> Transparency Consistency Risk mitigation
2. Systems and Data Integration	<ul style="list-style-type: none"> Fragmented systems and tools – which may be “owned” by different parties – DAS, multiple Service Providers Homegrown systems that cannot adapt or scale 	<ul style="list-style-type: none"> Countywide consistent, integrated functionality Focus on “first things first” – countywide portfolio data, analytics, opportunities 	<ul style="list-style-type: none"> Data consistency and integrity Risk mitigation Critical platform for enabling local and global strategy
3. Supply Chain Integration	<ul style="list-style-type: none"> Fragmented service provider relationships Geographies and service lines split between Service Providers with minimal opportunities for synergies and scale Added Service Provider management expense and transaction time 	<ul style="list-style-type: none"> Consolidation to one or two providers countywide Focus on integration and alignment with real estate’s enterprise and operational goals and objectives Incentives aligned with delivery of total enterprise outcomes 	<ul style="list-style-type: none"> Strategic alignment and focus Streamlined team and management fees Synergies and scale; reduced costs and cycle times
4. Service Line / End-to-End Process Integration	<ul style="list-style-type: none"> Dominant focus on service line processes and performance Service line orientation may exacerbate the silo effect and lead to sub-optimal end-to-end outcomes 	<ul style="list-style-type: none"> Introduction of Project Management Office -like discipline into the delivery model Integrated end-to-end delivery of solutions focused on total outcomes that provides visibility to the status of key activities in process Revamped management routines focused on front-end resolution of issues that pose risk to project budget, schedule, or quality 	<ul style="list-style-type: none"> Improved outcomes: cost, quality/scope, schedule
5. Enterprise Performance Management	<ul style="list-style-type: none"> Real Estate has some metrics, but they are not comprehensive and aligned to overall County goals and objectives 	<ul style="list-style-type: none"> “Cascading” performance management model that aligns County goals, Real Estate priorities/ management metrics, and Service Provider management metrics 	<ul style="list-style-type: none"> Strategic alignment with the business Managing and messaging Real Estate’s value to the enterprise



Operations Assessment

Integrated Performance Reporting (IPR)

IPR Benefits

Integrated performance reporting is an outcome of the development an optimized real estate organization. The performance reporting model enables all participants to monitor and measure performance.

Integrated Performance Reporting Model Defined

County Goals	County Leadership	Real Estate Senior Management	Real Estate Functional Management	Service Provider
Reduce Efficiency Ratios	<ul style="list-style-type: none"> Occupancy Ratios Operating Expenses 	<ul style="list-style-type: none"> Occupancy Cost Expenses/FTE Occupancy Cost Expenses/workspace Utilization ratio (FTEs / # workspaces) 	<ul style="list-style-type: none"> Occupancy Cost Expenses/ Area (SF) Area/FTE Total cost of vacant space/occupancy cost 	<ul style="list-style-type: none"> Operating cost breakdown by area (SF)
Increase Productivity	<ul style="list-style-type: none"> Administrative cost / area 	<ul style="list-style-type: none"> Area managed/ FTE 	<ul style="list-style-type: none"> Transactions Project Value/ Project Mgmt Property/ Facilities Mgmt 	<ul style="list-style-type: none"> Properties/ Tech Service call frequency Service call response time
Reduce Operating Risk	<ul style="list-style-type: none"> Prioritize major occupancies Reduce portfolio footprint Data/process metrics 	<ul style="list-style-type: none"> Prioritize critical scheduled maintenance Projects that are over budget 	<ul style="list-style-type: none"> Health, safety, security and environmental Compliance 	<ul style="list-style-type: none"> Operational benchmarks Equipment performance benchmarks
Efficient Capital Deployment	<ul style="list-style-type: none"> Capital commitment by Dept (trend / forecast) Capital pipeline ROI 	<ul style="list-style-type: none"> Depreciation forecast 	<ul style="list-style-type: none"> Project Cost / SF 	<ul style="list-style-type: none"> Component cost / SF
Customer Satisfaction Enable customers to focus on Core Service Delivery	<ul style="list-style-type: none"> Overall satisfaction with service 	<ul style="list-style-type: none"> Satisfaction across major categories 	<ul style="list-style-type: none"> Satisfaction relative to functional categories 	<ul style="list-style-type: none"> Satisfaction across service specific categories
Employee Satisfaction	<ul style="list-style-type: none"> Overall satisfaction with company 	<ul style="list-style-type: none"> Satisfaction across major categories 	<ul style="list-style-type: none"> Satisfaction relative to functional categories 	<ul style="list-style-type: none"> Satisfaction across service specific categories



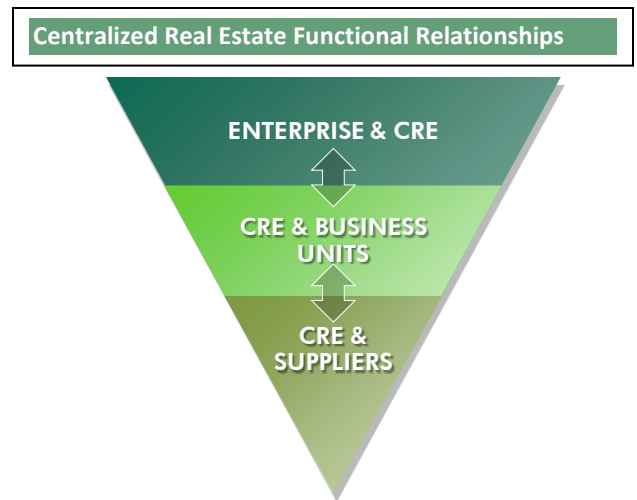
Operations Assessment

CHANGE MANAGEMENT

Integrated Governance Models

Governance Model Defined

- For integration of any type to be effective, clarity about governance practices is essential
- Governance describes the people, policies and processes that provide the frameworks for organizations and partners to make decisions and take actions to optimize outcomes related to their individual and combined spheres of responsibility
- The diagram to the right illustrates the relationships between a Centralized Real Estate (CRE) function and the Enterprise, Departments (Business Units) and Suppliers
- Governance structures include:
 - Real Estate Advisory Councils
 - Geographic
 - Line of Business
 - Asset Type
 - Client Relationship Management
 - Committees and Subcommittees
 - Initiative Teams
 - Documented Policies & Procedures
 - Documented Decision Support Methodologies



PROCESS RECOMMENDATIONS

CBRE recommends that Milwaukee County implement a Shared Services Model for oversight and management of its real estate portfolio. The private sector has been utilizing Shared Services since the 1980's with a large number of Fortune 500 companies employing the model. Two primary components of Shared Services are related to human resources and process efficiency.

Duplication of effort and redundant resources can be eliminated via consolidation of human resources. Processes drive efficiency which drives savings which is the second benefit of Shared Services. Positive outcomes of Shared Services models include: economies of scale, centers of expertise, data management and analytics, best practices and customer service. However, in order to drive process standardization and efficiency, the organization must:

- Set up and utilize technology platforms to achieve desired results



Operations Assessment

- Foster cultural change and employee adjustment to transform the organization from a decentralized model to a shared services model
- Facilitate constant communication with a robust change management program.

Role of Portfolio Managers

CBRE recommends that Milwaukee County formalize the role of Portfolio Manager with a defined set of roles and responsibilities. The following list identifies the primary roles of that function.

- Facilitate the delivery of services provided by the County through an optimized real estate portfolio
- Manage the portfolio in a cost effective manner in order to maximize the value of every dollar allocated to real estate
- Support the long term role of government throughout the delivery of all services and in the County
 - Minimize operational constraints in the delivery of services
 - Meet the workplace needs of county workers
 - Maximize facilities to enhance productivity
 - Provide a framework and management structure for effective decision making
 - Develop tools to support financial decision making
 - Develop business continuity strategies to reduce risk and financial loss

Portfolio IQ™ Opportunity Recommendations

Selected pages in Sections 3, 4, 6, 7 and 8 with the Portfolio IQ™ header contain proposed solutions to a wide variety of identified issues in the Milwaukee County portfolio. These same opportunity identification slides are used by many multi-services clients of CBRE around the globe with real estate issues similar to Milwaukee County. They begin on the following pages and as a group address the following primary topics:

- Organization & Process
- Portfolio Alignment Strategies
- Facilities Management
- Operating Expenses
- Project/Construction Management
- Workplace Solutions
- Market Opportunities
- Energy and Sustainability



Operations Assessment



Organization & Process
Near Term - Priority 1

Consider Restructure of Real Estate Functions to Improve Operating Efficiencies and Streamline Job Functions

Re-align facilities department to allow a single executive to lead all aspects of asset management for the county portfolio.

PROPOSED SOLUTION

- Consolidate all real estate, and facilities administration/building operations under a single department.
- Consider partnering with 3rd party service providers to support asset management where appropriate

BENEFITS

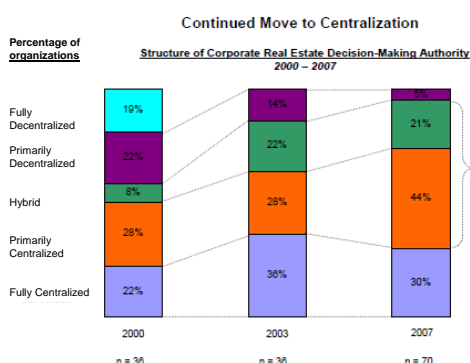
- Establishes clear hierarchy.
- Enhanced job function for departmental leaders.
- Reduces operating expenses.
- Improves decision making.
- Aligns skill sets appropriately.
- Aligns business functions appropriately.
- Reduces occupancy costs.
- Improves project completion time.
- Improves ability to take advantage of industry best of class practices.

Current Status

- Currently some building operations functions are aligned under separate departments and different reporting structures.

Risks/Costs

- Time, energy and effort needed to implement a new model
- Concerns associated with partnering with private sector to provide selected functions to the county
- Concern about misperception regarding loss of absolute control by departments.



Organization & Process
Near Term - Priority 1

Develop and Host Best Practice Workshops

Initiate structured meetings to train staff and share best practices. Arrange by geography or department

PROPOSED SOLUTION

- Establish "Best Practice" real estate seminar on quarterly basis for appropriate level personnel at the county. Could include three (3) focus areas:
 - Real Estate Strategic Planning and Transaction Management.
 - Facilities Management/Green Building/Sustainability.
 - Construction/Project Management.

BENEFITS

- Education program for appropriate level personnel or executives at the county.

Current Status

- Currently there are no best practices workshops that are routinely held.
- Given today's economic climate, many states and local governments are "managing by crisis". Many of Milwaukee County's peer group have developed strategies that could benefit the county operationally and financially if employed.

Risks/Costs

- There is no risk or cost.



Operations Assessment



Organization & Process
Near Term - Priority 1

Maintain and Manage a Training Program

Establish a training program that identifies and delivers staff development needs. Address training for current position skills maintenance, industry best practices, career development, necessary certifications, ethics and quality process.

PROPOSED SOLUTION

- Establish training program in three distinct areas:
 - Real Estate Strategic Planning and Transaction Management
 - Facilities Management
 - Project (Construction) Management

BENEFITS

- Employee job enrichment.
- Improved employee recruitment and retention.
- Better performance across portfolio in multiple disciplines.

Current Status

- Routine staff training is not held on a regular basis

Risks/Cost

- Training can be held with minimal direct cost
- More extensive training programs may require direct funding.

Assumptions

- Training for all employees to be performed on a quarterly basis.



Organization & Process
Medium Term - Priority 1

Analyze Amount of Partnered Functions

As part of the overall staffing model consider contracting for tactical functions as part of a comprehensive staffing plan.

PROPOSED SOLUTION

- Establish a contingency plan with qualified partner for all real estate operational functions.

BENEFITS

- Significantly reduced cost to county.
- Improved performance.

Current Status

- Milwaukee County should review the level of partnered functions.
- Policies and procedures should be developed for using service contractors.
 - Establish need
 - Determine which services can better be delivered by outside contractors based on frequency of demand and level of skills required
 - Determine the trade-off between quality and quantity to drive best value pricing
 - Use leverage to drive more competitive pricing and along with quality considerations determine the correct number of contractors

Risks/Costs

- Cost for Facilities Management is to be determined based upon scope.
- Cost for Project Management is to be determined based upon scope.



Operations Assessment



Organization & Process
Medium Term - Priority 1

Develop and Implement Employee Recognition Program

Develop employee and service provider employee recognition program...

PROPOSED SOLUTION

- Recognize employees in major operating units on quarterly basis by Department Head. Annually, Employee of the Year in each operating unit receives commendation from Governor with recognition ceremony including employee's immediate family members.
- Commence (simple) one (1) page newsletter that is distributed internally electronically .

BENEFITS

- Increased employee dedication and morale.
- Recognition by those administrative and elected officials for the good work being done by real estate.

Current Status

- Milwaukee County currently does not have a recognition program for outstanding achievement for employees.
- Employee successes are not routinely promoted either internally or externally.?

Risks/Costs

- There is zero cost associated employee recognition for superior performance.
- There is no significant cost associated with the distribution of a newsletter (especially electronically) or press release for real estate success stories.



Organization & Process
Medium Term - Priority 1

Update Building Administration Technology Platform

Assist client with review and selection of software solution for the management of leased and owned property records.

PROPOSED SOLUTION

- Integrate common real estate data across all systems to avoid inefficient data retrieval, mistakes and wasted staff time.

BENEFITS

- Easy access to information
- System becomes user friendly
- Improve communication flow
- Ability to benchmark data
- Reduced staffing required for updating and tracking information

Current Status

- Main frame accounting system not currently linked to field operations
- Multiple facilities management systems in use - Facilities uses emaint™ for work orders, while airports use Maximo™.
- VFA system used for capital tracking by Facilities Group. Facilities Condition Index (FCI) is being upgraded to track maintenance and capital expenses.

Risks/Costs

- Cost associated with investment in a new/upgraded technology platform
- Training time
- Staff commitment to use systems as designed
- Funding of ongoing upgrades is required once systems are selected



Operations Assessment



Organization & Process

Medium Term - Priority 1

Develop or Improve Operation/Process Manuals for each Function

Create Service Line Process Manuals for facilities department and contract service provider.

PROPOSED SOLUTION

- Evaluate all existing process manuals as a starting point for scope definition.
- Create new or upgrade existing process manuals for basic service delivery.
- Implement playbooks.

BENEFITS

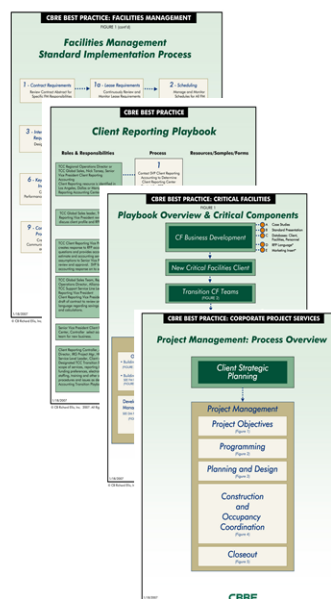
- **Faster integration and training for new employees.**
- **Reduction in operational errors.**
- **Improved service levels.**

Current Status

- The county does not have process manuals and playbooks for various real estate departments and functions .

Risks/Costs

- No risk associated with the improvement of process manuals.
- Cost will be the personnel time require to map, record, and distribute manuals on a consistent basis.
- Need to consider quality control in addition to the basic mapping of the process for transactions, facilities management, and design and construction.



Organization & Process

Medium Term- Priority 1

Implement Customer Satisfaction Surveys

Distribute Customer Satisfaction Surveys on regular basis to gain continuous feedback on performance. Surveys can be event based (project completion) or interval based (annually).

PROPOSED SOLUTION

- Implement electronic survey to Agency heads regarding their experience with the real estate process.
- Implement electronic survey on behalf of Real Estate Director.
- Create a regular newsletter that updates internal customer on new projects, current project status, success stories and best practices.

BENEFITS

- Maximize feedback and improve communication.
- Quicker corrective action if needed.
- Provides a compass to the end user to gauge both quantitative and qualitative results.
- Benchmark performance allowing greater autonomy and independent validation for key performance indicators.
- Solidify best practices.

Current Status

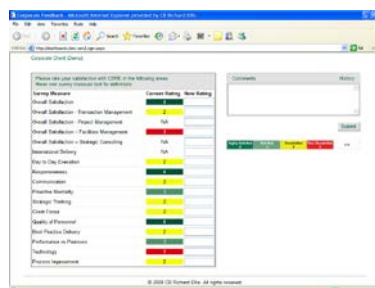
- Milwaukee County currently uses customer satisfaction surveys after completion of major capital projects.

Risks/Costs

- Personnel needed to implement, track and report.
- Must have ability to react and take corrective actions.
- Must remain neutral when faced with constructive criticism.
- Risk associated with exposure of poor performance.

Assumptions

- The top departments should be surveyed initially.
- Approve survey in advance and provide same survey for all agencies.



Sample Client Satisfaction Dashboard



Operations Assessment



Organization & Process
Medium Term - Priority 1

Implement Defined Process of Continual Improvement with Client and Account Teams

Implement a process for measuring and improving performance.

PROPOSED SOLUTION

- Define areas that could be reviewed for process improvement.
- Identify technology requirements (if any) to track and manage processes.
- Develop an implementation plan including cycle time for each process improvement to be measured.
- Adjust staffing and implement training as required.

BENEFITS

- Savings identified by performance measurement.
- Enables staff to work more effectively by reducing time required for completion of specific tasks.

Current Status

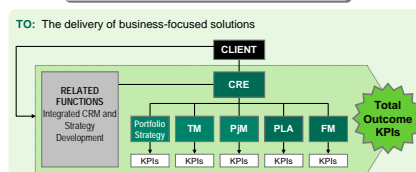
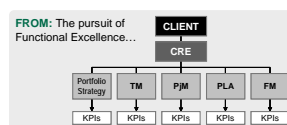
- There is no system-wide program to benchmark and measure performance on a regular basis.

Risks/Costs

- Methods for measuring continuous improvement can be time consuming and irrelevant if right metrics not selected.
- Additional staff cost to establish program may be recovered over the longer term implementation of process improvement.
- Technology improvements may be required to gather and process data.

Assumptions

- Primary areas for evaluating process improvements are in transaction, facilities and project management. Incomplete metrics exist.



Performance Measurement "Total Outcome" KPIs



Organization & Process
Medium Term - Priority 1

Implement Best Practices for Portfolio Administration

The county should embrace "Best practices" portfolio solutions from the private sector.

PROPOSED SOLUTION

- Identify existing processes that should be included in a "best practice" review.
- Develop a plan for transformation of the real estate services platform.
- Develop a timeline for implementation and execution.

BENEFITS

- Can lead to lower operating costs by improving the process and reducing cycle times.
- Can improve quality of service delivery and increase internal client satisfaction.

Current Status

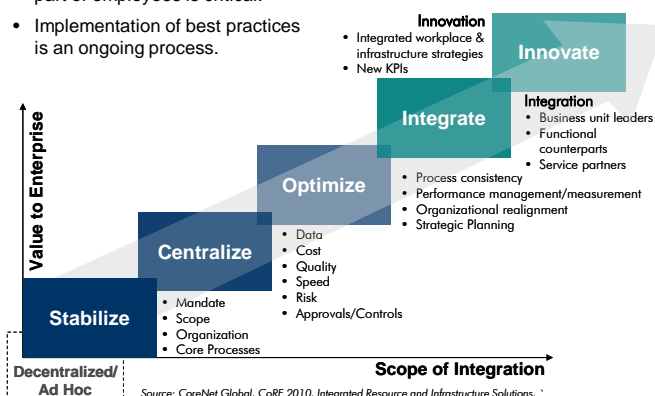
- There is no consistent system or procedures to implement best practices.

Risks/Costs

- Risks are minimal.
- Some strategies may require 3rd party training or expertise.

Assumptions

- A willingness to change on the part of employees is critical.
- Implementation of best practices is an ongoing process.



Best Portfolio Administration Practices
(continued on following slide)

Source: CoreNet Global, CoRE 2010, Integrated Resource and Infrastructure Solutions, *



Operations Assessment



Organization & Process
Medium Term - Priority 1

Implement Best Practices for Portfolio Administration

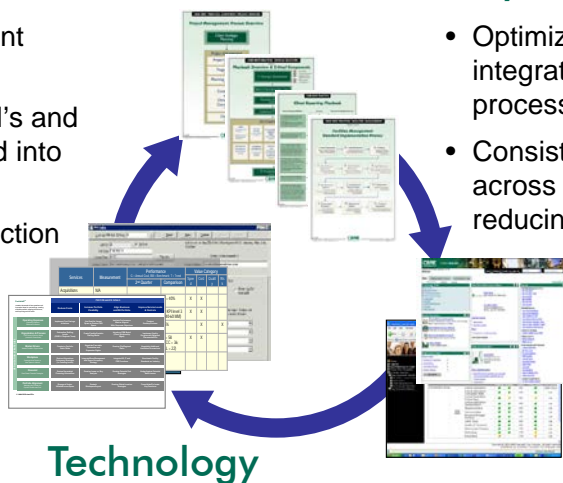
Streamline Client Approval Process to Reduce Cycle Time (Transaction Management, Project Management). Reduce process for review and approval by a select and minimal number of authorized parties.

Reporting & KPIs

- Standardized client reporting
- Pre-identified KPI's and metrics integrated into workflow tools
- Customer Satisfaction Score

Playbooks

- Optimized and integrated business processes
- Consistent processes across network, reducing cycle time



Technology

- Web-based Due Diligence system
- Document imaging



Organization & Process
Medium Term - Priority 1

Integrate Payroll, IT and Real Estate

Improve integration of payroll, IT and real estate through increased communication and coordination.

PROPOSED SOLUTION

- Create a shared services planning group that meets quarterly to exchange information concerning changes in staffing and workplace strategies.
- Identify technology changes that will support the organization and the new workplace.
- Identify data needs that can enhance the management of real estate such as utilization data by location.
- Implement an Executive Order or Directive that requires agencies to report FTE counts, contractor counts and occupied locations at least once annually.

BENEFITS

- Drive cost savings through better alignment of business planning and workplace strategies with the real estate.

Current Status

- Systems for payroll (FTE counts), technology and real estate management are not integrated

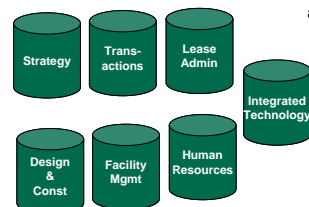
Risks/Costs

- Current management of staff and fiscal resources during difficult economic times requires a higher level of coordination and communications.
- Risks of operational and financial missteps increases with poor communications.
- There is minimal cost to create more open lines of communications.

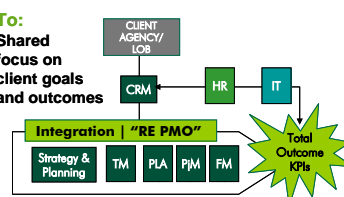
Assumptions

- Real estate occupancy is a high cost, longer term commitment that requires lead time to plan effectively and reduce expenses.

From: Service line silos
focus, playbook processes & performance measures (KPIs)



To:
Shared focus on client goals and outcomes



To:
Integrated "playbooks"





Operations Assessment

PORTFOLIO ALIGNMENT RECOMMENDATIONS

Current State

Milwaukee County's real estate portfolio has grown or contracted for various reasons over time (i.e. new programs, combined departments, federal funding, cost pressures, etc.). Much of the real estate portfolio was acquired based upon business operating strategies that may not be valid today or are changing due to economic conditions, technological advances, or a changing customer service delivery model. Part of the Real Estate Department's mission is to match the current and future real estate portfolio to the customer service delivery model of each agency/department.

The investment to restack space may be significant (depending on individual circumstances) but the payback is relatively short term.

For example, if reconfiguring space cost \$30.00 per square foot in county owned or leased space that has an annual cost of \$15.00, the payback term (operating expenses not considered) could be as little as two (2) years.

Portfolio Alignment Summary

Current Status	Observations/ Recommendation	Change Management Benefits
<ul style="list-style-type: none"> MC currently occupies many poorly maintained, high cost and underutilized facilities Deferred maintenance is growing at many locations 	<ul style="list-style-type: none"> Identify underperforming assets that are not needed for the delivery of county services Sell poorly performing and surplus assets 	<ul style="list-style-type: none"> Reduction in maintenance costs Reallocates capital for repair and replacement of core facilities Allows reallocation of staff resources
<ul style="list-style-type: none"> Many county functions are spread across widely dispersed facilities 	<ul style="list-style-type: none"> Identify core facilities in central locations Backfill and improve primary county buildings at the Courthouse campus 	<ul style="list-style-type: none"> Improved staff productivity Higher space utilization rates Improved occupancy cost metrics
<ul style="list-style-type: none"> No consistent strategic planning process to reduce space footprint 	<ul style="list-style-type: none"> Develop processes to match supply and demand for space – Track vacancy Integrate space disposition planning into annual property review Develop routine staff forecast surveys 	<ul style="list-style-type: none"> Matches space need with availability Helps to forecast changes in need for space Better tracking for space dispositions
<ul style="list-style-type: none"> Excess inventory of furniture, equipment and supplies spread throughout many facilities 	<ul style="list-style-type: none"> Surplus supplies are not inventoried and occupied space that could be used for county functions Evaluate, inventory and clear out stored furniture, equipment and supplies 	<ul style="list-style-type: none"> Elimination of safety hazards Recovery of useable square footage Better able to access and use stored furniture, equipment and supplies

Primary Initiatives

Portfolio Downsizing

- Eliminate poorly maintained, underutilized and high energy cost facilities to reduce overall operating costs
 - Develop criteria to identify underperforming assets
 - Eliminate as many addresses as possible to reduce infrastructure, maintenance and capital costs
 - Timing: Medium term
 - Cost: Medium – Decommissioning, move and disposition



Operations Assessment

- Develop consolidated government centers/campuses to create staff efficiencies and reduce travel downtime
 - Evaluate locations to determine optimal locations for consolidation and collocation
 - Timing: Medium term
 - Cost: Medium – Move and tenant improvement
- Identify vacant space through facility inspections to help departments reduce their real estate cost allocations and recapture underutilized space for use by other users with space needs
 - Perform an “on site” inspection of each major County facility to identify all vacant and underutilized space including offices, workstations, storage, etc.
 - Timing: Near term
 - Cost: Low – Move and tenant improvement
- Rationalize inventories of excess furniture, equipment & supplies to eliminate items that will never be used and to free up area used as storage for department use and clear hallways for egress
 - Immediately dispose of excess furniture to free up vacant space for other office operations and clear out storage and work areas to improve safety and working conditions
 - Timing: Short term
 - Cost: Low – Staff resources to sort and move furniture

Portfolio Planning

- Integrate space disposition planning into annual property portfolio review to reduce spend on underutilized and inefficient facilities that are not Mission Critical
 - Train department staff to identify potential opportunities for space disposition
 - Timing: Short term
 - Cost: Medium
- Develop routine surveys from business plans for staff forecasts to optimize space planning
 - Develop routine surveys from business plans for staff forecasts
 - Timing: Near term
 - Cost: Low
- Create on-line list of available vacant space for internal use to have a first look at underutilized available space that is currently owned or leased by the County
 - Creating and maintaining an availability inventory will assure that vacant space is considered prior to an assessment of other options
 - Timing: Short term
 - Cost: Low



Operations Assessment

Secondary Initiatives

Alignment of Departments

- Collocate and consolidate departments based on strategic adjacency needs
 - Identifying adjacency needs reduces staff travel time and common space that is duplicated at multiple locations
 - Timing: Medium term
 - Cost: Medium

Surplus Property Planning

- Create an on-line tool for disposition of real estate
 - Develop an on-line system that is linked to overall property tracking system
 - Timing: Medium term
 - Cost: Low
- Consolidate back office functions across departments.
- Review existing departmental real estate cost allocation methodology.

Benefits

By aggressively managing the real estate portfolio to agency/departmental needs, Milwaukee County will reduce or avoid the need to lease privately owned space or carry excess owned space. Agency consolidations and co-locations can reduce the amount of support space and services in all locations. Finally, through the use of planning tools, cost allocation models and on-line databases to aggressively manage space, the County can react more quickly to address shortages and manage surplus real estate.

Province of Ontario Case Study

Partnering to provide expertise that is not available in-house is a key element in the implementation of a comprehensive portfolio strategy. Ontario Realty Corporation, an agency of the Ontario provincial government, has partnered with outside consultants to provide property and land management services for real estate assets. Attributes of the partnership include:

- Established 10 year repair program
- Operating a mobile work force for remote facilities
- Developed integrated playbooks for core service offerings
- Implementing findings of Provincial Energy Master Plan
- Implemented integrated technology platform for CMMS and space, project and portfolio management
- Linked project information to accounting, sourcing and finance systems to enable the measurement of key performance metrics



Province of Ontario Case Study

- Portfolio Size
 - 50 million square feet
 - 6,500 buildings
 - 27 ministries
 - 100,00 acres of land



Operations Assessment



Portfolio Alignment Strategies
Medium Term - Priority 1

Create On-line List of Available Vacant Space for Internal Use

Creation of a web-based portal that provides departments with a listing of available properties or vacant space for potential tenancy.

PROPOSED SOLUTION

- Create an on-line inventory for all vacant owned and leased space including details such as available cubicles, storage space, voice and data capabilities, etc.

BENEFITS

- Reduce the amount of time and labor required to plan a relocation or consolidation.
- Reduce occupancy costs.
- Annual planning tool for budgetary and lease renewal considerations.
- Increase agency communication as to opportunities to consolidate or co-locate.
- Allow for long term strategy planning for dispositions.

Current Status

- There is no current and consistently updated database for available county space.

Risks/Costs

- Cost will be the time commitment of personnel and software expense/support to establish a reporting system and input baseline data.
- A commitment to keep system updated and maintained.

Assumptions

- Owned and leased space should be reported in one single database.



Portfolio Alignment Strategies
Long Term - Priority 1

Regional or Campus Portfolio Optimization

Develop a comprehensive real estate strategy and create solutions that address changing conditions (e.g., growth, expansion/contraction, mergers and acquisitions) and their impact on a regional or major campus portfolio.

PROPOSED SOLUTION

- Prepare master plans for county space that look at all aspects of the portfolio including backfilling space and consolidating.

BENEFITS

- Potential for large space reductions and cost savings
- Service levels can improve when spread over a more efficient footprint and agencies share services.

Stabilized Savings: Long term run rate.

One-Time Costs: May be need for design engineering help.

Payback: Can start initially with backfilling of space.

Current Status

- Major campus operations are housed in the Courthouse, Safety Building, Criminal Justice Facility, Coggs Center and City Campus and in several other locations around the city.
- A primary purpose of this study is to assist in rationalizing the use of primary properties.

Risks/Costs

- There is no risk in master planning for primary county occupancies. There is a greater risk in lack of planning.
- Costs may include some consulting fees for services including architects and engineers.

Assumptions

- Primary strategies for institutional campuses should include:
 - Identification of the most efficient and cost effective owned locations to create centers for consolidation.
 - Backfilling of owned space to reduce the overall footprint.
 - Review of overall occupancy costs to identify opportunities for expense reductions within major campus facilities.
- A key element in the portfolio optimization strategy is the cooperation of agencies that can co-locate and share services.



Operations Assessment



Portfolio Alignment Strategies
Near Term - Priority 1

Rationalize Inventories of Excess Furniture, Equipment & Supplies

Review portfolio space devoted to storing excess furniture, office supplies, computers, phone systems and other workplace supplies.

PROPOSED SOLUTION

- A policy review should be developed for closed facilities that sorts items for re-use and/or disposal.
- Surplus inventory should be catalogued, stored in low cost space not higher priced office locations.

BENEFITS

- Reduction in capital expenses, space costs for storage and management time.

Payback: Immediate if furniture can be reused. Cost reduction would occur by reducing storage space.

Current Status

- **Excess furniture and supplies are not cataloged and tracked. Is it difficult to determine if requests can be met by existing supplies. Potentially useable space is used to store furniture and equipment?**

Risks/Costs

- There is no risk to maintain a better inventory of existing furniture and equipment.
- The cost includes the manpower required to develop, implement and track existing inventory.

Assumptions

- In addition to tracking, it is assumed that surplus furniture and equipment that are beyond their useful life is routinely identified as surplus, discarded and/or disposed of by sale.
- Proper cataloging of excess inventory requires a policy for re-use or disposition.



Portfolio Alignment Strategies
Near Term - Priority 1

Identify Vacant Space for Alternative Use through Facility Management Inspections

Within a building or city plan, use Facility Management team to identify vacant space or cubicles, then consolidate and re-use vacancies.

PROPOSED SOLUTION

- Capture and report FTE and on-site contractor data for all locations annually.
- Field audit all locations to determine amount of vacancy in each location (leased and owned facilities).
- Develop per square foot cost estimate to "restack" vacant space.
- Reduce leased space in locations where vacancy identified.
- Move leased space to owned facilities where economically practical to do so.

BENEFITS

- Higher density and utilization in owned facilities.
- Reduction of lease property expense.

Stabilized Savings TBD

One-Time Costs: Restacking of owned buildings requires capital outlay.

Payback: Immediate.

Current Status

- Today, it is difficult to determine agency locations that may have surplus space available in leased or owned locations. This is in part due to:
 - Lack of current employee and contractor data.
 - Much of the vacant space is dispersed throughout agency locations and therefore difficult to identify and quantify.
 - Existing procedures do not promote aggregation and reuse of vacant space.
- While departments pay for the space they occupy, it is incumbent upon departments to track the efficient use of space.

Risks/Costs

- There is no risk associated with performing a field audit of each location and identifying how much space is actually vacant.
- The difficulty in capturing identified vacant space is the cost to "restack" and consolidate vacant space for use.

Assumptions

- Presume that 5-10% efficiency could be realized if all vacant space in owned buildings could be captured and utilized.



Operations Assessment



Portfolio Alignment Strategies
Medium Term - Priority 1

Rationalize Real Estate Portfolio by Comparing Business Objectives with Real Estate Requirements (Balance Supply with Demand for Space)

Rationalize department strategy, operational objectives, and forecasted needs with existing real estate portfolio and financial imperatives to develop an acquisition/disposition strategy.

PROPOSED SOLUTION

- Balancing supply with demand requires an ability to track space utilization by agency and by floor/suite.
- Need to work with departments, facilities management and IT to develop the following:
 - Method to track space quarterly.
 - Determine responsibility for tracking.
 - Identify IT systems required for data capture.
 - Develop a method for tracking near term projections for changes in staffing.

BENEFITS

- Allows the county to back-fill vacant space.
- Underutilized or surplus owned space can be sold.

Payback: Immediate if space can be backfilled and new space not acquired.

Current Status

- Departments are facing budget deficits across all operational areas.
- There are currently no annual business plans that project staffing and space needs.

Risks/Costs

- There is little risk in downsizing underutilized space in a contracting economy.

Assumptions

- Periodic department master plan documents can be used as the basis for the development of a real estate forecasting document.



Portfolio Alignment Strategies
Medium Term - Priority 1

Develop Ongoing Planning, Processes and Tools for Department Space/Staff Forecasts

Develop annual or semi-annual space forecasts through increased dialogue with various stakeholders including Human Resources, Real Estate and other departments.

PROPOSED SOLUTION

- Initiate dialogue between primary stakeholders in the facility planning and staff forecasting process.
- Develop templates for storing data and IT platforms for collection and dissemination of inputs.

BENEFITS

- Cost reduction through better advance planning.
- Improved space utilization metrics.
- Accelerated response time when space needs arise.

Current Status

- Space and staff forecasting capabilities varies by agency/department.
- Data is not routinely shared between payroll, Real Estate and other departments.
- Lack of integrated planning leads to reactive rather than proactive decision making concerning real estate.

Risks/Costs

- There are no risks in greater collaboration among staff for planning and space forecasting purposes.
- Computer Aided Facilities Management (CAFM) systems that integrate portfolio planning, forecasting and space management systems are a more expensive solution but costs may be recaptured quickly through better planning.

Assumptions

- Initial implementation can be achieved through internal process and policy decisions at an executive level.



Operations Assessment



Portfolio Alignment Strategies
Medium Term - Priority 1

Separate Assets into Core (Mission-Critical) and Non-Core Categories

Identify mission-critical owned or leased assets based on use/function .

PROPOSED SOLUTION

- Confirm the whether each facility is mission critical to the operations housed in the building.
- Assess whether those mission critical facilities are functionally obsolete or costly as compared to market alternatives.
- Prepare the business case for potential replacement of inefficient or outdated facilities.

BENEFITS

- Provides for continued operations in core facilities .
- May reduce cost through consolidations.
- Opportunity to upgrade facilities for future operations.

Current Status

- Selected core functions should be maintained as owned facilities. These assets include the courthouse and primary criminal justice facilities as well as other buildings that are critical to government operations.
- This strategy assumes that Milwaukee County has enough capital budgeted to adequately maintain these facilities over the long term..
- This study was commissioned in part to determine the viability of selected assets and to help formulate a policy to assess the future use of assets.

Risks/Costs

- Maintenance of multiple facilities requires sufficient capital on an ongoing basis to fund base building improvements and accommodations to new technologies and energy saving infrastructure.

Assumptions

- Current and proposed systems for tracking facility needs need to be updated and maintained.



Portfolio Alignment Strategies
Long Term - Priority 1

Relocate/Consolidate to Lower Cost Facility

Relocate tenancy from an unnecessarily high cost facility into space that is less expensive.

PROPOSED SOLUTION

- Review all facilities for possible consolidation and /or relocation to lower cost facilities.
-

BENEFITS

- Possible reduction in number of locations.
- Increase occupancy at current owned facilities.

Current Status

- Some departments are located in higher cost facilities that are not mission critical.

Risks/Costs

- Cost to perform space programming to determine how much space is actually needed given current economic climate and service delivery model.
- Insufficient budget to fund department build-out cost
- The approvals necessary to move forward .
- Employee concerns regarding relocation



Operations Assessment



Portfolio Alignment Strategies
Medium Term - Priority 1

Consolidate Back Office Functions Across Departments

Identify and eliminate redundant back office functions (e.g. call centers, accounting hubs, printing etc.) and excess space devoted to these activities. Create consolidation strategy based on holistic back office needs of the departments.

PROPOSED SOLUTION

- Reduce/eliminate unnecessary space.
- Consolidate real estate functions and budget authority from all agencies/department to real estate.

BENEFITS

- Reduced costs, greater security and upgraded facilities.
- Increased control over real estate function.

Current Status

- With respect to real estate support activities, significant redundancy may exist if many agencies/departments are performing some real estate functions.
- Currently some accounting functions are centralized, while some functions are handled by field staff such as parks, the airport, trades , etc.

Risks/Costs

- Employees may be sensitive to transfer from existing agencies/departments to real estate.



Portfolio Alignment Strategies
Medium Term - Priority 1

Implement Occupancy Cost Allocations to Departments

Develop cost allocation practices that are consistent, fair, and reflect the cost differentials between individual properties.

PROPOSED SOLUTION

- Determine actual occupancy costs by building/department/agency.
- Redirect ALL agency and facility related budgets pertaining to occupancy and account payable functions to real estate.

BENEFITS

- Agencies will feel no immediate impact on their annual budgets for facility costs.
- With greater aggregation and control over facility costs, real estate should be able to reduce occupancy costs over time.

Current Status

- A standard cost allocation is applied to departments for real estate occupancy.
- There is no detailed tracking of real estate costs by building.

Risks/Costs

- Agencies/departments can benefit from a more uniform cost allocation model.
- High or low cost facilities such as data centers, laboratories or warehouse space should be excluded from any kind of uniform cost allocation model.

Siteplan

Expenses by Site

XYZ1002 825 University St. Chicago, IL, Leased Office (Managed /) 60,800 RSF 63,731 USF
 XYZ1002-01 578 Plaza Garage 2nd and 3rd Floors (Modified Gross) 5/28/2002 12/31/2013 69,839 RSF 69,731 USF
 XYZ1002-01 Inc. Co. of America (Income Modified Gross) 4/1/2004 12/30/2013 11,039 RSF 11,009 USF
 Subtotal 5/2/2009 40,140 RSF 40,140 USF

Select an item to view details.

Page 1 of 3

GL Acct	Description	2004 Actual	2004 Plan	2005 Plan	2006 Plan	2007 Plan	2008 Plan	2009 Plan	2010 Plan
400-0100	Tenant Rents	\$219,793	\$194,052	\$201,899	\$201,899	\$207,849	\$207,849	\$207,849	\$207,849
400-0200	Operating Expense Reserve	\$672,812	\$674,799	\$674,799	\$674,799	\$674,799	\$674,799	\$674,799	\$674,799
400-0200	Property Tax Recoveries	\$855,962	\$854,967	\$854,205	\$854,204	\$855,962	\$855,962	\$855,962	\$855,962
400-0200	Other Recoveries	\$845,032	\$845,349	\$845,021	\$845,021	\$845,190	\$845,190	\$845,190	\$845,190
400-0110	Electricity	\$41,468	\$31,022	\$31,600	\$45,904	\$45,900	\$45,900	\$45,900	\$45,900
400-0140	Telephone	\$437	\$0	\$0	\$0	\$0	\$0	\$0	\$0
400-0150	Utilities - Other	\$0	\$0	\$0	\$0	\$1,280	\$0	\$0	\$0
400-0200	Janitorial Contract	\$176	\$0	\$0	\$0	\$0	\$0	\$0	\$0
400-0200	Janitorial Supplies	\$1,129	\$127	\$1,500	\$1,507	\$1,500	\$1,500	\$1,500	\$1,500
400-0200	Carpet/Floor/Inlets Clean	\$2,473	\$0	\$4,000	\$4,900	\$7,000	\$7,000	\$7,000	\$7,000
400-0200	Sanitation Others	\$0	\$0	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500
400-0410	HVAC Contract	\$0	\$0	\$2,100	\$2,100	\$2,100	\$2,100	\$2,100	\$2,100
400-0430	HVAC Repair	\$2,837	\$0	\$2,000	\$1,600	\$3,000	\$3,000	\$3,000	\$3,000
400-0450	HVAC - Other	\$0	\$0	\$1,000	\$1,000	\$0	\$0	\$0	\$0
400-0520	Electrical Parts/Repair	\$1,536	\$5,083	\$5,800	\$4,200	\$4,400	\$4,400	\$4,400	\$4,400
400-0530	Plumbing Parts/Repair	\$199	\$0	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700	\$1,700
400-0530	Signage Parts/Repair	\$0	\$0	\$300	\$400	\$1,900	\$1,900	\$1,900	\$1,900
400-0530	Painting Interior/Exterior	\$10,814	\$0	\$12,000	\$10,300	\$14,100	\$14,100	\$14,100	\$14,100
400-0530	Pest & Rodent	\$779	\$0	\$1,200	\$700	\$2,000	\$2,000	\$2,000	\$2,000
400-0530	Repair & Maintenance Oth	\$5,226	\$4,012	\$88,000	\$45,720	\$5,620	\$5,620	\$5,620	\$5,620



Operations Assessment

FACILITIES MANAGEMENT RECOMMENDATIONS

Current State

Highly Decentralized Management, Staffing and Accountability

The current decentralized facilities management model has fostered many long-term problems that if left unresolved will impact the ongoing asset preservation, maintenance and management of County facilities.

Facilities Management Summary

Current Status	Observations/ Recommendation	Benefits
<ul style="list-style-type: none"> Decentralized facilities management Inconsistent asset management tools and standards applied across the portfolio 	<ul style="list-style-type: none"> All FM functions should be centralized to better coordinated budgets, policies, procedures and manpower 	<ul style="list-style-type: none"> More efficient staffing levels Better maintenance tracking Improved expense management
<ul style="list-style-type: none"> Decentralized purchasing 	<ul style="list-style-type: none"> Centralized purchasing leads to better vendor management and benefits from larger work orders 	<ul style="list-style-type: none"> Improved pricing, Better vendor coordination Improved service levels
<ul style="list-style-type: none"> There is no standard repository of all equipment tracking and information 	<ul style="list-style-type: none"> An Asset Numbering Standard should be established to identify all critical and non-critical assets 	<ul style="list-style-type: none"> Better tracking for maintenance Assists with tracking for budgets, warranties and staffing
<ul style="list-style-type: none"> Lack of centralized inventory management for furniture, machine parts and supplies 	<ul style="list-style-type: none"> Inventory should be tracked and securely stored Materials stored in mechanical room areas should be moved to secure storage 	<ul style="list-style-type: none"> More efficient control of purchasing Reduced loss and damage Reduced floor space dedicated to materials that will never be used
<ul style="list-style-type: none"> Routine building and systems repairs have become a backlog of deferred maintenance repair items 	<ul style="list-style-type: none"> Reducing the overall size of the portfolio thru dispositions should free up additional unallocated dollars to repair existing facilities Create a plan to address repair and replacement of deferred maintenance items 	<ul style="list-style-type: none"> Fixing deferred maintenance items avoids more costly capital repairs later Routine scheduled servicing increases the life of building components
<ul style="list-style-type: none"> Knowledge based technology systems for tracking capital expenses and work orders are underutilized and not integrated 	<ul style="list-style-type: none"> VFA system is undergoing an update to improve capital expense planning eMaint™ functionality should be expanded and linked to current accounting platforms Common platforms, controls and forms should be used across all departments with real estate responsibilities 	<ul style="list-style-type: none"> Improved capital and operating expense tracking Faster response time for handling building maintenance problems Increased staff efficiencies

Primary Initiatives



Operations Assessment

Facilities Management Organization

Reorganize Facility Management department to reflect industry best-practices standards

- Initiate a top to bottom review of the Facilities Management staffing, functions, information monitoring, budgets and systems to identify key areas for enhanced service delivery and cost controls
 - Implement best practices solutions for databases, staff development, processes, procurement and vendor contracts
 - Establish key performance metrics (See Appendix D for Sample Portfolio Metrics)
 - Timing: Near term
 - Cost: Medium
- Create an action plan to address changes in staffing management required to transform the oversight and management of facilities management operations
- Initiate a top to bottom review of staffing to address the following:
 - Managing workflow with continuing cuts in resources
 - Aligning skills with assigned tasks
 - Handling union concerns during transition period
 - Preparing gap analysis to identify skills that may need to be provided through outsourcing
 - Break-out of labor costs allocated to specific facilities
 - Knowledge gap created by retirements
 - Timing: Medium term
 - Cost: Low – Staff resources address staffing model
- Centralize real estate purchasing for all building related materials, supplies and services to increase leverage with suppliers, control costs and manage inventory
- Current practices allow for the purchase of supplies and contracted services through multiple departments and with many vendors
 - A centralized purchasing and accounting function will reduce expenses through the coordination of bids, tracking of expense and management of vendors
 - Goods and services to be aggregated and procured could include but not be limited to utilities, janitorial and maintenance contracts, paper goods, cleaning materials and supplies, elevator contracts, snow removal, etc.
 - Timing: Near term
 - Cost: Low – Staff resources address purchasing

Facilities Management Process



Operations Assessment

- Implement an electronic Work Management (Job Request) Practice
 - Develop Work Process Controls that are standardized across all agencies
 - Develop Work Process Forms
 - Provide quick reference guides or online training for all employees that can request a "Job Request."
 - Timing: Short term – Current accounting classifications are already set-up
 - Cost: Medium – Staff resources to identify and track items, staff training and possibly software upgrades
- Create an inventory of machine parts and supplies to reduce overspending and monitor intake/outflow
 - Inventories should be tracked and securely stored to control purchasing, prevent loss from theft or damage in non-secure storage
 - Timing: Near term
 - Cost: Low – Staff resources address inventory identification
- Review and improve knowledge based technology systems to track maintenance, confirm building conditions, handle work orders, evaluate key building metrics, handle purchasing and control costs
 - Evaluate current VFA, eMaint™ and property tracking platforms to identify gaps in data tracking
 - Timing: Near term
 - Cost: Low – Staff resources to review systems with consultants

Facilities Management On-Site Initiatives

- Create an action plan to address the use of mechanical rooms as shop and storage areas
 - Initiate a top to bottom review of building mechanical areas to identify stored materials that should be removed from storage areas
 - Timing: Short term
 - Cost: Low – Staff resources to sort and move furniture
- Upgrade the current preventive maintenance program to include a plan, budget and schedule for the repair and maintenance of buildings and equipment throughout the portfolio
 - Currently there is no centralized tracking of routine repairs and maintenance of façades, interiors and equipment
 - Establish Preventive Maintenance Standards (alignment should be across all County agencies, if maintenance responsibilities are not aligned under a single organization)
 - Timing: Short term
 - Cost: Medium – Staff resources to track items – Coordinate with VFA contract
- Establish a program to identify all equipment
 - Establish an Asset Numbering Standard
 - Identify Critical and Non-critical Assets



Operations Assessment

- Timing: Short term – Current accounting classifications are already set-up
- Cost: Medium – Staff resources to identify and track items – probably work with VFA to ID equipment

Secondary Initiatives

Facilities Management On-Site Initiatives

- Walk through all major file floor areas where files are densely housed to determine ownership, need and options for file removal to open up additional areas for housing County functions and departments
 - Initiate a top to bottom review of building mechanical areas to identify stored materials that should be removed from storage areas
 - Timing: Medium term – Disposition of files may be dependent on staffing resources and document regulations
 - Cost: Medium – Staff resources to catalogue, scan and address file disposition

Realignment of Facilities Management Organization

As a primary component of the County real estate organization, it is recommended that the facilities management functions be re-organized and consolidated through a process that eliminates redundancies and centralizes oversight while establishing mechanisms to foster institutional experience sharing and collective learning. Key components of this process include identifying the skill sets and personnel required as the organization transforms to a more service and process oriented organization.

- Develop critical success factors and skills required to for each position
- Build a staffing plan around the revised building portfolio taking into consideration the age, condition and types of equipment at each location
- Align the skill sets of each employee with the requirements of every position
- Provide ongoing training to enhance the “fit” of employees for positions that require a higher level of skills
- Create an internal “Experts Network” of employees that would become shared resources across all properties and whose primary objective would be adding value by promoting a consistent and uniform approach to the delivery of such services, and by sharing the organizational knowledge best practices and overall service experience among the buildings and across the department.



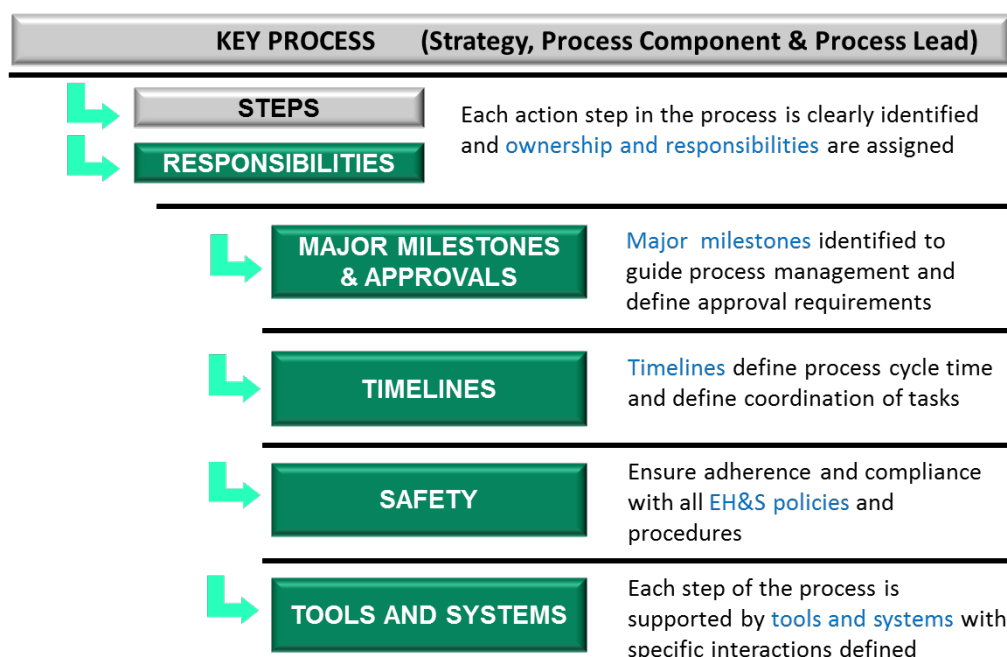
Operations Assessment

Standardization of Operational Processes for All Facilities

One of the most evident observations from the facilities assessment was the absence of common processes which should be used to assign, perform, track and expense routine services and maintenance in buildings. Processes are very important to a facilities management organization, as they provide a structured approach to planning and managing diverse organizational policies. They add uniformity and consistency around the methods employed today to deliver the same type of service across the different departments. Processes are also fundamental for the adequate management of technology tools and the creation of leveraged management practices. With better integrated platforms, organizations continue to improve the way they deliver services.

A fundamental characteristic of a process definition plan is assessing what the components of an effective process should be. A direct approach to process definition is illustrated below.

Key Operational Process Steps Defined



Many Operations and Maintenance groups get mired in the actual execution of their operations neglecting to invest and evaluate their processes as a tool to improve systems and to enhance customer services. Facilities management processes or “workflows” should be well established practices within the organization, and at the center of every action to render customer services.

Process Strategy Components

The recommended process strategy components would be comprised of nine major categories, covering all of the major management processes within a facilities environment:

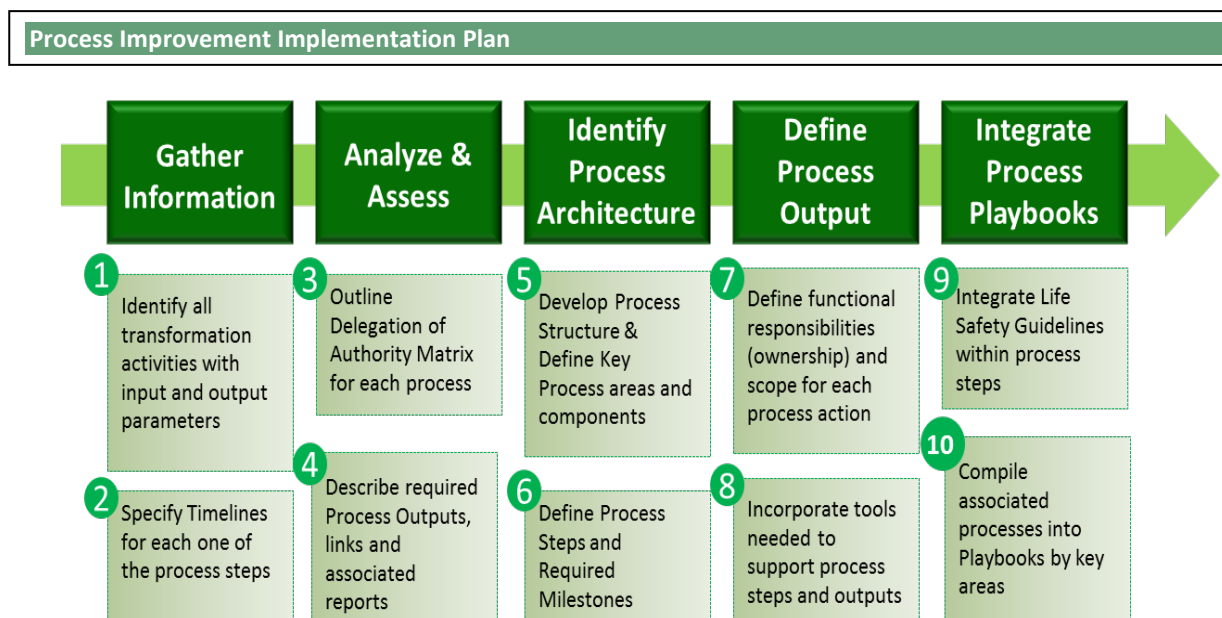
- Facilities Strategy
- Talent Development
- Engineering, Operations and Maintenance
- Energy and Sustainability



Operations Assessment

- Financial Optimization
- Life Safety and Occupational Health
- Strategic Sourcing
- Resilience Planning
- Customer Support Services

The following diagram outlines the required steps in a process improvement implementation plan:



Implementation of an Operations and Maintenance Technology Tool

Milwaukee County and its departments require well maintained facilities and equipment that are adequately and readily available to support the delivery of services. A Computerized Maintenance Management System (CMMS) enhances the reliability of the assets by assisting the planning, executing and controlling of all maintenance activities, infrastructure projects and cost optimization opportunities related to them. The CMMS also helps provide standardized procedures for reporting, document management and data analysis.

Key Factors for Selecting Computerized Maintenance Management Systems

- | | |
|---|--|
| <ul style="list-style-type: none"> ■ Data Acquisition ■ Software Cost ■ Hardware Cost ■ Software Functionality ■ Scalability & Customization ■ Implementation | <ul style="list-style-type: none"> ■ Time ■ User Training ■ Support and Maintenance ■ Data Architecture ■ Report/ Dashboard Support ■ Wireless and Paperless |
|---|--|





Operations Assessment

It is essential that a facilities management program allows for scalable multi-site connectivity; flexible access architecture; intuitive work order management for both customers (requesters) and technicians performing the tasks; enterprise asset tracking; inventory management; flexible reporting and dashboard indicators; and remote access availability through mobile devices (PDAs, Tables, Cellular phones, etc.).

Using a technology tool as a fully integrated Enterprise Asset Management System (EAM) will assist in extending the useful life of assets by up-keeping equipment health and reducing overall maintenance and repair costs in a short period of time. Among other features, an adequate technology tool should be able to:

- **Extend the useful life cycle of the assets** - Adjusting maintenance frequencies and allowing equipment to run in steady mode under a Condition Based Maintenance program helps extend the life of equipment.
- **Track total cost of ownership** - This cost optimization component can control budgets for services and materials, manage up-to-the-minute inventory and capital outlays.
- **Maximize uptime** - By monitoring specific operating parameters and all maintenance activities on equipment, the users are able to reduce the occurrence of breakdowns and to forecast the possibility of malfunctions.
- **Enhance efficiencies** - With the adequate planning tool, maintenance activities can be consolidated under short spans of time to allow for sharing of specialized tools and resources and minimize down time.
- **Optimize complex systems** - It is essential to deploy a tool that helps monitor operating parameters to assess overall efficiency of the operations, track parameter trends and generally optimize the asset performance.
- **Effectively comply with regulatory requirements** - CMMS are also a quality assurance tool that can help meet diverse industry standards, ISO parameters or regulatory requirements (i.e. emissions) for different facilities.

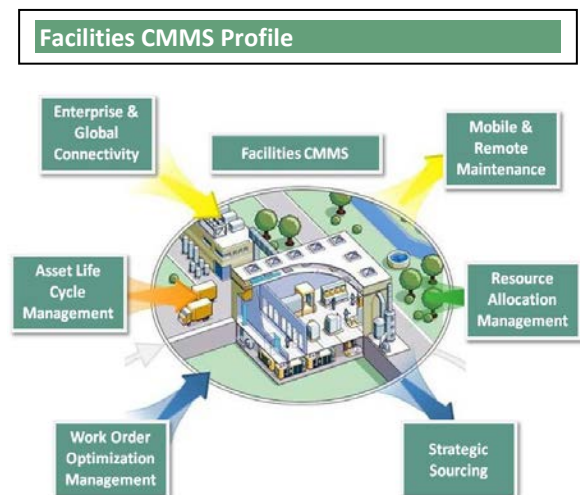
Key Components of a CMMS

For a technology application to be an effective web-based Computerized Maintenance Management System (CMMS), the tool has to incorporate the ability to administer services through an online call center, perform timely work order management and assist with preventive and predictive maintenance functionalities (which would be the most used features of the system in a normal Facilities Management environment).

It is also essential that the system have global connectivity capabilities across the enterprise (both from the technology and human perspectives) and that it can support efforts to adequately and effectively allocate resources (staff, inventory, equipment and capital investments), where they are best needed within the facilities. An implementation schedule is required and a typical duration from data acquisition to "Go-Live" day and user training should be around six months.

The required components of an Enterprise Asset Management should resemble the graphic to the right. As a point of comparison, we recommend that the selection is based mainly on three major functionalities of a typical Enterprise Asset Management System or CMMS:

- Client Service Request Module - User interface
- Preventative Maintenance Module - Most used feature
- Reporting Capabilities





Operations Assessment

The remainder of this section further explores each one of these three key features.

Client Service Request Module

The Client Service Request module must be a web-based service management solution specifically designed for commercial real estate. Detailed and optimized service request life cycle tracking creates an environment where service accountability is welcomed.

The application should contain real-time functionality that interacts with most any handheld wireless messaging device to speed service delivery. Specialized request management tools keep coordinators constantly in touch with service levels, ensuring consistent attention to service. Customized, easy-to-use Client Services Interface can reduce clients' phone talk time by up to 80%. **Key features should include:**

- "At a glance" view of real-time service level conditions and special attention requests
- Permanent detailed request and work order life cycle tracking
- Certificate of Insurance check when issuing work orders to vendors
- Automated work order routing and escalation
- Pre-determined decision points including the correct assignment and urgency for each service type helps move the order to dispatch quickly and correctly. This function allows standard consistent service levels across a portfolio while managing exceptions and unique sites with speed and accuracy.
- Quick search for requests or work orders
- Wireless and paperless dispatch through to closure with a broad range of wireless messaging devices including cell phones, two-way pagers, Palm Powered™ devices, Blackberry™ PDAs, from all types of other carriers (allows for paper if required)
- Integrates with commercial real estate A/R systems
- Task layering and multi-tasking for compound work schedules
- Certificate of Insurance check when issuing work order to vendors
- Configurable call attention and unfinished work order alerts to supervisors

Preventative Maintenance Module

An important aspect of any CMMS for Facilities Management is anticipating client needs and preventing problems. With a qualified system, a CSR can generate corrective or service orders and automatically dispatch both corrective and auto-generated preventive work orders, track breakdowns, monitor asset history, measure productivity, and generate reports – simply and quickly. Better preventive maintenance practices minimize equipment downtime while reducing risks, costs and tenant inconvenience.

Work forecasting predicts upcoming preventive maintenance loads and predicted service request levels, enabling effective resource planning. Easy to use work order lists instantly show you how your team is doing.

Key features should include:

- Detailed asset maintenance tracking, including breakdowns
- Automated and unattended work order generation, dispatch and retrieval
- Paperless and wireless work order dispatch and closure to Palm Powered™ devices, Blackberry™ PDAs, from all carriers (allows for paper if required)



Operations Assessment

- Instant views on real-time PM work order status
- Flexible scheduling options generate work orders when and as required
- Check points and reading lines for detailed PM procedures
- Work forecasting and planning with predicted service request load, for any specified time period

Reporting Capabilities

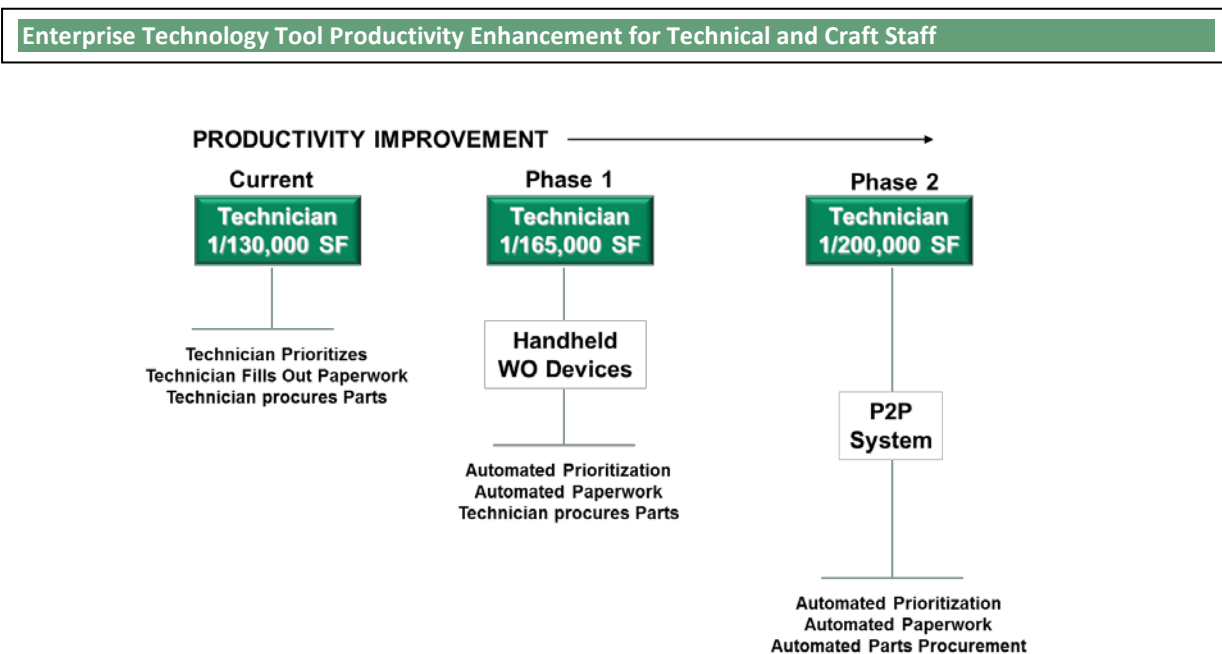
It is expected that Clients can customize most reporting features within the CMMS but the most commonly used reports that would be expected from the CMMS are:

- Event Costs
- Monthly Uptime
- Monthly Financial Summary
- Monthly Work Order Summary

Technology to Streamline Organizational Structures

The implementation of enterprise technology tools as a fundamental component of a Total Asset Management Strategy will cause the secondary effect of allowing organizations to optimize further the number of staffing needed to take care, custody and control of the facilities involved in the program. Based on experiential knowledge and field data collected from our Clients, CBRE has determined that there is a direct connection between the stages of technology implementation and the staffing gearing ratios needed within those organizations.

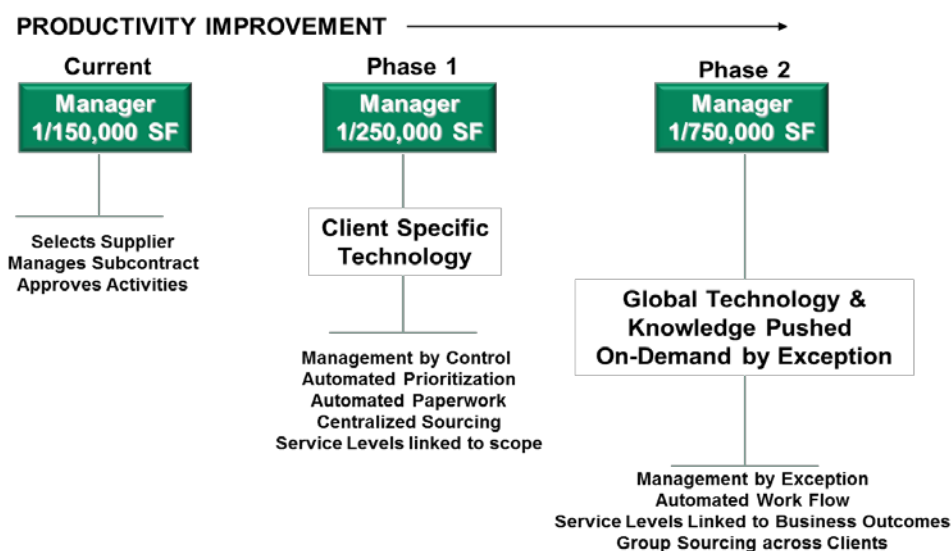
The following two graphs illustrate the relationship between the primary parameters;





Operations Assessment

Enterprise Technology Tool Productivity Enhancement for Management Staff



The current approach for managing operation and maintenance services in the County is based on a compounded decentralized effect that creates redundant organizations within several departments. This approach dilutes the organizational knowledge and prevents the efficient dissemination of best practices due to the silo effect that each department creates.

Under the CBRE recommended organizational mode, the structure changes to one integrated network and while each one of the agencies retains the independent day-to-day delivery of the services in the field. A second network is created to support the rendering of those services:

- The first network integrates the internal facilities organizations within the County.
- The second network would concentrate the delivery of specialized services that can be performed more cost effectively with leveraged resources, or because their knowledge base makes them best-in-class experts in a specific area of expertise.
 - This last network would include under the first category of services that have been partially outsourced today such as cleaning. Services that would require partners selected because of their wider knowledge base and their known capabilities, are those concentrated around real state strategy and enterprise-wide innovation. Examples of these practices are: Strategic Sourcing, Facilities Management Strategy, Sustainability and Carbon Footprint Reduction Services, Energy Management Services, in-the-field Project Management, etc. The experience of the selected partners and their capabilities would determine the magnitude of the scope to be contracted.

Benefits

By changing policies and procedures to reflect private sector standards and using a “best practice” technology platform, the County could significantly reduce operating costs and streamline operations with no diminishment of service levels.



Operations Assessment



Facilities Management
Medium Term - Priority 1

Establish Facilities Operations and Maintenance Metrics

Create a site-specific equipment operations and maintenance plan. Focus on reducing energy consumption via operating temperatures, pressures and times of use and reducing maintenance frequency based on use, criticality and predictive analysis.

PROPOSED SOLUTION

- Enhance current FM software system to automate and track all key metrics.
- Reduce energy consumption and comply with sustainability initiatives and report results.
- Consult with the Real Estate Team utility specialist to see if federal funds may be available.
- Establish contingency planning with qualified partner for planned and unplanned attrition
- Tie customer satisfaction and work completion criteria to performance objectives

BENEFITS

- Reduce operating costs.
- Improve communication and reporting.
- Reduce number of work orders and/or planned preventative maintenance.
- Improve customer relations.
- Align with sustainability initiatives.
- Reduce number of service calls.
- Prolong equipment life.

Current Status

- The County needs to upgrade energy management tracking by building to enhance energy efficiency and conservation by department.
- The identification and tracking of other key metrics that would allow greater efficiencies in process at each building would be enhanced with a more robust and customizable facilities management software program.

Risks/Costs

- Cost associated with upgrading to new or enhancing current software.
- Cost associated with training human resources on new or enhanced software.
- Risk of human resource apprehension to new or enhanced software.
- Time and effort is needed to train and support human resources on new or enhanced software
- Civil service process can be an impediment to performance alignment

Assumptions

- The current accounting software has the ability to track facilities expenses. A link needs to be made between information that can be entered in the field and the appropriate expense line items in the accounting system.



Facilities Management
Medium Term - Priority 1

Implement Cost Effective Building Operations & Maintenance Purchasing

Providing building operations and maintenance at the lowest possible cost. Use Portfolio IQ checklist for cost saving strategies.

PROPOSED SOLUTION

- Allow for flexibility in the competitive bid process to take advantage of changing market conditions.
- Define criteria to qualify vendors prior to bid submission in order to ensure the vendors are ready, willing and able to deliver the required service or product.
- Coordinate purchasing across the entire real estate portfolio.

BENEFITS

- Reduce occupancy costs.
- Reduce lease costs.
- Drive bottom line performance.
- Greater flexibility in decision making.
- Improve service delivery.
- Take full advantage of economies of scale.

Current Status

- A new procurement director has been hired to handle contracting.
- Purchasing needs to be coordinated across all real estate portfolios
- The county uses state contracts for some contracts.

Risks/Costs

- Public mistrust and scrutiny
- Potential legislative opposition

Sample Spend Analysis Tool





Operations Assessment

OPERATING EXPENSE RECOMMENDATIONS

Current State

Expenses are currently tracked on an aggregate basis with no ability to break-out expenses in detail by building. Accounting codes that are currently in-place could be used to track expenses.

Operating Expenses Summary

Current Status	Observations/ Recommendation	Change Management Benefits
<ul style="list-style-type: none"> Inability to track facilities data by building and service 	<ul style="list-style-type: none"> Staff is not trained and equipped to input information for tracking facilities Facilities training and IT systems need to be set-up to properly record and track information. 	<ul style="list-style-type: none"> More accurate control of real estate spend Improved vendor management Ability to identify and control excessive utility costs
<ul style="list-style-type: none"> Decentralized procurement 	<ul style="list-style-type: none"> County has set-up a new procurement department All purchasing should be centralized 	<ul style="list-style-type: none"> Lower vendor pricing More effective vendor management
<ul style="list-style-type: none"> Multi-building portfolio with many high energy cost facilities 	<ul style="list-style-type: none"> Criteria and systems need to be developed to identify underperforming assets 	<ul style="list-style-type: none"> Eliminate or repair facilities with high energy costs

Primary Initiatives

Operating Expense Management

- Collect and track facilities data including operating expenses by property
 - Benchmark these costs across all departments/agencies to identify those facilities which are expensive to operate and maintain.
 - Compare data to private sector equivalents
 - Timing: Short term – Current accounting classifications are set-up
 - Cost: Medium – Staff resources to track identify and track items

- Initiate a procurement strategy to consolidate purchasing of goods and services to reduce costs.
 - Goods and services to be aggregated and procured could include but not be limited to utilities, janitorial and maintenance contracts, paper goods, cleaning materials and supplies, elevator contracts, snow removal, etc.

Achieving Real Savings

The investment to restack space may be significant (depending on individual circumstances), but the payback is relatively short term.

For example, if reconfiguring space cost \$30.00 per square foot in county owned or leased space that has an annual cost of \$15.00, the payback could be as little as two (2) years.



Operations Assessment

Portfolio Downsizing

- Eliminate poorly maintained and high energy cost facilities to reduce overall operating costs
 - Develop criteria to identify underperforming assets
 - Eliminate as many addresses as possible to reduce infrastructure, maintenance and capital costs
 - Timing: Medium term
 - Cost: Medium – Decommissioning, move and disposition

Benefits

Consolidating budget authority for all real estate expenditures to the DAS will:

- Eliminate redundant administrative positions at the agency/departmental level.
- Allow for the accurate measurement of facilities costs and increase control of all occupancy expenses across the portfolio.
- Allow for the aggregation and purchase of goods and services in support of real estate operations.



Operating Expenses
Near Term - Priority 1

Benchmark Overall Occupancy Metrics

Compare key metrics (both internal and external) such as: Cost per SF, Cost per employee, SF per employee, occupancy cost relative to department peers, etc.

PROPOSED SOLUTION

- Transfer budget and responsibility for all real estate functions from agencies/departments to the facilities department.
- Capture all occupancy data annually and compare to:
 - Industry standards
 - Year to year SOM goals, including agency budgets

BENEFITS

- Improved information flow allows for streamlined decision making.
- Reduce occupancy costs.
- Greater control, negotiating power for service contracts.
- Increased use of owned space.
- Opportunity to reduce leased space.

Current Status

- The County currently uses space standards and near term planning to formulate strategies for department moves
- Occupancy metrics that measure year-over-year performance are not currently tracked

Risks/Costs

- There is an ongoing commitment and cost associated with the need to capture and track data annually.
- A software enhancement may be needed to upgrade systems to either track information or align with facilities management software to perform the same function for owned and leased space.
- Without the data mentioned above, the facilities department cannot determine whether the agency/ department is above or below market conditions.
- With incomplete data, the county does not take full advantage of its purchasing power.

Assumptions

- Milwaukee County will develop systems to track occupancy costs (rent), utilities, janitorial and other costs by department and building



Operations Assessment

PROJECT MANAGEMENT RECOMMENDATIONS

Current State

Highly Decentralized Management, Staffing and Accountability

Project Management includes the oversight of various construction projects, installation and commissioning of furniture fixtures and equipment and management of the physical movement of personnel. The current decentralized project management model has fostered many long-term problems that if left unresolved will impact the ongoing asset preservation, maintenance and management of County facilities.

Project Management Summary		
Current Status	Observations/ Recommendation	Benefits
<ul style="list-style-type: none"> Decentralized project management 	<ul style="list-style-type: none"> All project management functions should be centralized for more 	<ul style="list-style-type: none"> More efficient staffing levels Better maintenance tracking Inventory management Expense management
<ul style="list-style-type: none"> Decentralized purchasing 	<ul style="list-style-type: none"> Centralized purchasing leads to better vendor management Leverage national contracts thru buyer pools 	<ul style="list-style-type: none"> Improved pricing, Better vendor coordination Improved service levels
<ul style="list-style-type: none"> Lack of written processes for routine projects, repairs and maintenance 	<ul style="list-style-type: none"> Processes should be developed in the form of Playbooks Processes should be tracked using technology tracking tools 	<ul style="list-style-type: none"> Improved levels of routine maintenance Lower levels of equipment failure Better cost tracking

Primary Initiatives

Implement Best Practices for Project Management

- Collect and track facilities data including operating expenses, move costs and capital expenses by property
 - Review current processes and standards and compare/benchmark with best-practices strategies (See Appendix D for sample metrics).
 - Implement project delivery Playbooks for routine projects and processes
 - Match staff to current workload and use contract partners to manage peak loads or difficult projects
 - Place all projects in one technology tracking tool
 - Leverage national contracts and preferred providers to reduce capital project costs.
 - Timing: Short to Medium term – Steps can be taken immediately to begin process planning; Change management and requisite training programs will require more time
 - Cost: Medium – Training, tracking and changes in staffing may require some capital outlay, however, savings can be expected from increased productivity and capital savings



Operations Assessment



Project/Construction Management
Near Term - Priority 1

Develop Move Management Standard Process

Establish clear and well documented process that integrates all parties in the Move, Add, Change (MAC) process. Consider Computer Aided Facility Management (CAFM) implementation as a tool.

PROPOSED SOLUTION

- Partner with private sector to enhance move management capabilities and develop a consistent and streamlined move management process.

BENEFITS

- Reduce county staff.
- Reduce expenses.
- Improve efficiencies.
- Quicker turn-around time.
- Improved communication.
- Improve service level to Agencies.
- Consistency among move management process.

Current Status

- Department moves are tracked, but people are not.
- The county does not track the average cost of each move.

Risks/Costs

- There may be a need to partner with a third party service provider to facilitate move process. Costs need to be assessed.
- Backlash from potential staff reductions may occur if the county partners with the private sector.

Assumptions

- Partnering may reduce overall expenses while improving the process.



Project/Construction Management
Near Term - Priority 1

Implement Best Practices for Project Management

Implement a Best-In-Class project management solution

Current Status

- There is no project management schedule for routine projects that are repeated on a periodic basis such as paint and carpet across the portfolio.
- Individual departments may have their own budgeted allocations for selected improvements in their operating budgets
- Project management staffing is spread across several different departments such as parks, airport, courthouse, etc.
- Project management staff are not connected with PDAs to central management and accounting
- Fees for design and construction services are not billed back to agencies on a percentage basis?
- There is no Computer Aided Facilities Management (CAFM) system for project tracking?

Risks/Costs

- The cost to implement a best practices solution including technology enhancements or Playbooks (defined processes, responsibilities, and deliverables) may be off-set by a realignment in staff and capital savings.
- Any reduction in staff count needs to be carefully managed to ensure that projects are being effectively managed, proper geographic coverage is maintained and institutional knowledge is retained.
- Potential staff reductions may be resisted by Agencies and Departments.

Assumptions

- Design and Construction has a process in place for delivering projects, however, partnering will likely enhance the current delivery process.
- Legislation may need to be modified to allow Design and Construction to award to the lowest qualified bidder rather than the "lowest" bidder.

Best In Class Project Management Practices (continued on following slide)



Operations Assessment



Project/Construction Management
Near Term - Priority 1

Implement Best Practices for Project Management

Implement a Best-In-Class project management solution

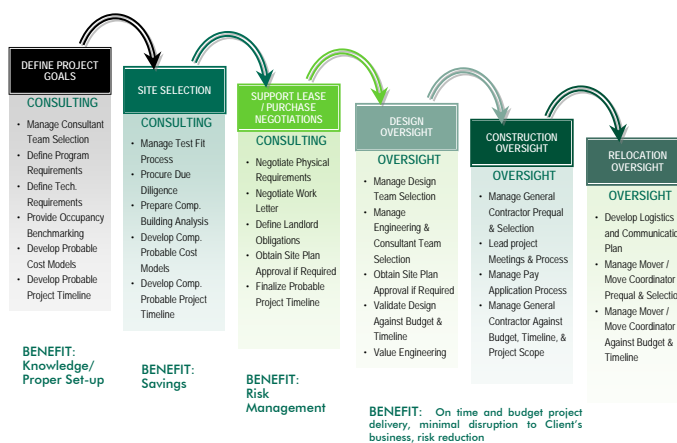
PROPOSED SOLUTION

- Review current processes and standards and compare/benchmark with private sector strategies.
- Implement project delivery Playbooks.
- Match staff to current workload and use contract partners to manage peak loads or difficult projects.
- Place all projects in one technology tracking tool.
- Leverage national contracts and preferred providers to reduce capital project costs.

BENEFITS

- Reduced project costs
- Redeploy existing staff.
- Retain intellectual capital.
- Variable staffing as needed.
- Enhanced and integrated communication process via technology solution .

Project/ Construction Management Planning and Execution





Operations Assessment

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Space Allocation

SPACE ALLOCATION OVERVIEW

The CBRE Team reviewed space standards, installed work spaces and proposed alterations.



Space Allocation

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Space Allocation

Space Allocation Approach

Review of Current Space Configuration and Portfolio Plan From 2009

- Space standards outlined in the 2009 Milwaukee County Space Allocation report – both existing (in 2009) and proposed at that time - are larger than currently recommended for public and private sector offices
- Current space configurations and high walled workstations hinder collaboration in departments that work on joint projects and deliverables

Current Practices Reviewed

- Mobile workers who spend a significant amount of time out of the office are not currently working in shared space
- Detailed occupancy by department, floor and location needs to be updated and continuously maintained
- There is no formal policy for accommodating, equipping and training telework employees
- Excess workstations are often used for storage and not redeployed for staff occupancy
- There is no focus on “office of the future” concepts
- Many spaces are in need of remodeling to improve morale and increase productivity

Space Allocation Summary

Current Status	Observations/ Recommendation	Benefits
<ul style="list-style-type: none"> • Milwaukee County standards have larger space allocations for offices & workstations than many comparable organizations 	<ul style="list-style-type: none"> • The large number of office and cube size variations based on title and pay grades, make office reconfigurations less flexible • Reduce the number and size of office/ workstation variations to increase flexibility and reduce office footprint 	<ul style="list-style-type: none"> • More efficient floor layouts • Reduced square footage occupied • Creates space for specialized uses • Lowers overall occupancy cost
<ul style="list-style-type: none"> • Vacant undeveloped space, dead file/ furniture storage and oversized work spaces have created inefficiencies and underutilization in the Core Campus buildings 	<ul style="list-style-type: none"> • As departments are moved and spaces are remodeled, the County should downsize standards and re-stack inefficient floors 	<ul style="list-style-type: none"> • Better space utilization • Opportunity to create more collaborative work areas • Enables the County to reduce square footage and number of buildings occupied
<ul style="list-style-type: none"> • Typically each employee has a desk and there is minimal accommodation for work-at-home and mobile work 	<ul style="list-style-type: none"> • Selected departments have staff that spend more time out of the office than at their desks • Milwaukee County should explore work-at-home, desk sharing and mobile work to decrease the need for office space 	<ul style="list-style-type: none"> • Better space utilization • Opportunity to create more collaborative work areas • Enables the County to reduce square footage and number of buildings occupied



Space Allocation

Primary Initiatives

Space Standards

- Revise space standards to reflect current industry trends toward smaller workspaces, tele-work and a mobile workforce
 - Develop and consistently use space standards to allocate space on the basis of function, title or position
 - A comparison with private sector equivalents reveals that current Milwaukee County standards are larger than comparable private sector standards and many public sector users
 - Implementation of revised standards can be phased in when moves, adds or changes are made to space
 - Timing: Near term – Politically will require union and department involvement to set-up
 - Cost: Low – No real cost to change standards; Higher cost to implement if existing furniture cannot be reconfigured to match new standards
- Re-stack inefficient core campus buildings to maximize the use of the current footprint and amortize operating expenses, capital and staffing over a larger centralized employee base.
 - The CBRE Team has identified varying amounts of underutilized or vacant space throughout the portfolio that could be used for office purposes.
 - This type of space is most often not properly located or configured and may require capital dollars to appropriately re-use and require code and life safety upgrades as occupancy increases
 - Timing: Medium term – Requires planning and department involvement to set-up
 - Cost: High – Cost of build-out and move costs; Offset by operational savings from a reduced footprint
- Embrace Alternative Workplace Solutions to reduce square footage requirements in departments with employees who spend more time performing their job functions outside of the office.
 - If implemented, Alternative Workplace Solutions suggest that not every County employee needs a work station or office in order to perform their work on a daily basis.
 - Working from home or automobiles in many cases would be the preferred environment for employees that are customer facing or required to be in the field (inspectors, case workers, etc.).
 - Milwaukee County should identify departments with workers that may be able to work from home or at on-site locations of clients (inspectors, etc.)
 - Timing: Medium term – Requires planning and department involvement to set-up
 - Cost: Medium – Cost of home work area equipment/connections, mobile equipment upgrades and remodeled drop-down space in offices and require code and life safety upgrades as occupancy increases

Secondary Initiatives

- Develop an ongoing process for tracking space utilization data
 - Milwaukee County should track space occupancy on an on-going basis to periodically benchmark utilization
 - Timing: Medium term – Requires planning and department involvement to set-up
 - Cost: Medium – Staff resources required to gather, update and maintain data



Space Allocation

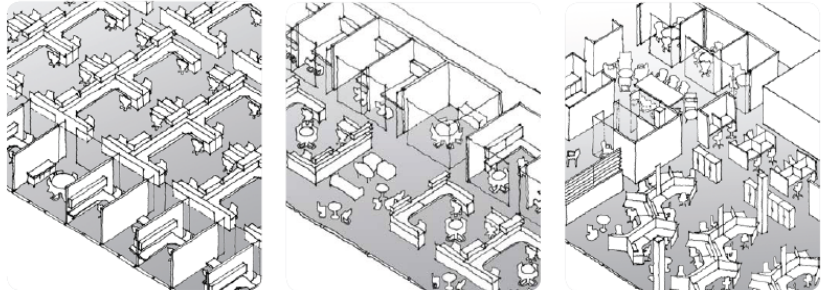
SPACE ALLOCATION BEST PRACTICES OVERVIEW

Space allocation criteria and standards applications are rapidly evolving due to costs pressures and in response to changing job functions, mobile connectivity and the realization that many workers are not performing their job tasks in a traditional office all day. The following trends are causing organizations to reassess the use of office space and drive increased utilization and reduced building area required to house workers.

■ Revised space standards

- Falling space allocations reflect the need for producing and filing less paper, increased collaboration in close proximity of team members and greater automation of processes and functions
- Print management initiatives are removing printers from individual workstations to save money on energy, supplies and real estate
- Office space design reflects a more open and flexible work environment designed for collaboration

Work Space Evolution From Conventional to Activity Based

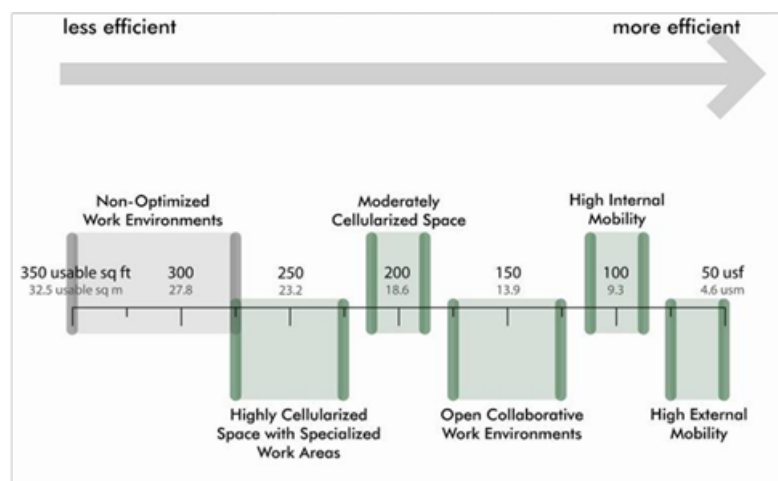


CONVENTIONAL	MORE OPEN	ACTIVITY-BASED
<ul style="list-style-type: none"> • Traditional office layout • Everyone has an assigned desk • Typical floor 	<ul style="list-style-type: none"> • Offices on the interior • More open / collaborative space 	<ul style="list-style-type: none"> • Various settings for various work • People share spaces • A vision of the future...

■ Mobile Workforce

- Workers are being equipped with mobile devices to contact their offices, measure results and record findings from remote locations. Dedicated in office workspaces are eliminated and replaced by drop-in desks and more common areas
- Employees that are required to check in or report to their supervisor on a weekly basis can do so in a “hotel” office environment where employees are provided a shared temporary workstation to plug in their laptop, have access to electronic files, copiers, telephone, etc.

More Efficient Workspace Leads to Lower SF/Person Metrics





Space Allocation

- Hennepin County in Minnesota has embarked on such an alternative workplace strategy called ROWE – Results Only Work Environment. Employees are measured on their performance and productivity and not on their time or presence in the workplace.
- The following excerpt from Governing magazine describes some of the successes and issues with a more flexible workplace environment



ROWE Rollout Successes and Challenges

BY: Heather Kerrigan | October 12, 2011

GOVERNING
THE STATES AND LOCALITIES

As Minnesota legislators faced off over a government shutdown in the capital, Hennepin County's Human Services and Public Health Department (HSPHD) finished rolling out its Results-Only Work Environment (ROWE) program, which emphasizes measurable results regardless of where or when work is being done. Employees can work with their teams to choose who can work from home, from a coffee shop, on vacation, or in the office, and on what days -- as long as employees are achieving results.

When I last spoke with Deb Truesdell, HSPHD's ROWE and telework manager, about half of the department's 2,700 employees had completed ROWE training. As of June, every employee is now practicing ROWE. That doesn't mean the program has been without its own challenges. Truesdell shares where ROWE is now, big surprises and what she'd do differently in this edited transcript.

What evidence do you have that this program is working?

We are seeing some numbers that are really positive. In our eligibility area, people are waiting less for their cases to be processed, and I would say there's a higher level of client service. I know there's been an increase in productivity. Now, work is about what's best for the organization and what's best for client services.

We also have a lot of information on how much of a difference ROWE has made in employees' lives. Gas prices are high, but you can save a lot of money by carefully planning when you are going to be downtown at the office. Some employees have responsibilities for children or other family members. ROWE can save you a lot of angst.

Were there unexpected results of the program?

One of the goals of ROWE was to be in a position to attract the best employees. Let's face it: The dollars aren't there. So every time a posting goes up, it mentions that we [practice] ROWE and it describes what that means.



Space Allocation

Our support and collections division hired four people. Two came from different local counties, from child support positions, so they needed no training. Look at the cost savings in that. All we had to do was get them access to the computer, and they could hit the ground running. One new hire took a pay cut to come to Hennepin County to work in ROWE.

One supervisor said the supervisors in the other counties were getting mad at him because we just hired five people. All of them either mentioned ROWE in their application or during the interview. Three came from other counties. For this position, they do the applications for public assistance and the first three months are spent in training at the state. We just hired three people that we don't have to send to state training. They can start doing work right now.

We saved a tremendous amount of time, dollars and client service. We certainly knew that we would be able to attract good candidates. We didn't know we'd be stealing them already trained.

What challenges are you still working to overcome?

We are still having growing pains. If you think about it, the first folks that began working in ROWE started two years ago. Now we have people just starting it. That has been difficult in itself.

Also, we are finding that many of our supervisors felt like they no longer understood what their role was. In the old environment, they knew what their responsibilities were -- command and control, making sure work got done, that people were at their desks, telling people what to do. ROWE changes that. Our supervisors have adapted really well, but some are really struggling. We do a lot of work with teams and their supervisors around those kinds of dynamics. We're also holding manager/supervisor meetings to find out what kind of support they need.

There continues to be some resistance among line staff, generally speaking. We have learned that it's either fear based or it is the fact that they don't have an understanding of what the environment is. There is a lot of focus on working anywhere they want, or they have great pride in their work and don't want to see their clients suffer. It's more of a misunderstanding. It's a results thing, not a remote thing.

One positive thing is we have such a great working relationship with our unions, and that continues to be positive and helpful toward switching our environment. The union has not created a banner that says they're behind us, but they have done everything but that. In many editions of their newsletter, they write positive articles about ROWE. I've gone to meetings to talk about it. It's not an adversarial relationship ever.

If you had to go back and do it all over again, what would you change?

If I were lucky enough to go back, I would have made sure we had better things in place to support our leadership. As you give individuals freedom, sometimes they want to run away and they have to be pulled back in. And sometimes, they don't want to leave their corral. They're comfortable, and they need coaching and assistance to take that step out. When you're talking about that range, the leader is put in a pretty tough situation. We've always been rewarded for command and control, so we chose leaders because they were very good at that. And now we're asking them to do something completely different, and that is hard. We could have done a better job, and we want to fix that.

This article was printed from: <http://www.governing.com/columns/rowe-rollout-successes-challenges-hennepin-minnesota.html>



Space Allocation

■ Teleworking

- Selected job functions can be performed by work-from-home employees
- While potential real estate savings can be large, technology platforms, security issues and HR policies must be addressed
- Estimated cost to equip tele-work station: \$4,000 to \$5,000
- The states of Virginia and Arizona are targeting a 20% tele-working participation rate

■ Records Storage

- Records storage initiatives are moving documents to electronic files and have reduced the need for in-office dead storage filing and increased file retrieval speeds for complex documents such as trial folders and real estate records
- The benchmark to the right indicates the amount of space formally dedicated to file/storage in 4 key buildings: Courthouse, Safety, City Campus and Marcia Cogs.
- Based on our building walk-throughs, we believe there is additional unassigned file space so this percentage may be higher
- The county has a scanning initiative that should be accelerated to move files of the floor and into cyber storage.

File/Storage Benchmark

File/Storage as % of assignable area

- County Core Buildings: 8 %
- IFMA Survey (1): 5 %
- Recent State Report (2): 4 %

1) IFMA – Int'l Facilities Management Assn. mixed use office

2) Recent strategy recommendation for specific state

Space Allocation Observations

Current Standards Reflect traditional Ways of Working and Collaborating

■ Current State

- Large variety of offices and workstations based on job titles
- Spaces reflect continued growth in paper file storage on floors
- Offices contain meeting spaces that are poorly configured for use within an office
- Full workstation configurations are provided for workers making infrequent office visits
- High walled workstations and closed offices act as a barrier to collaboration

■ Approach to New Standards

- Space standards should be designed to improve the function and workflow of the office
- Standards should be simplified to maximize flexibility as programs, people and workflows change
- Space should be allocated based on workflow and process rather than hierarchy
- Work areas should provide adequate spaces to meet, both formally and casually
- Space planning should incorporate the implementation of an aggressive electronic storage initiative



Space Allocation

■ New Space Standards Approach - Sample Layouts For Workstations

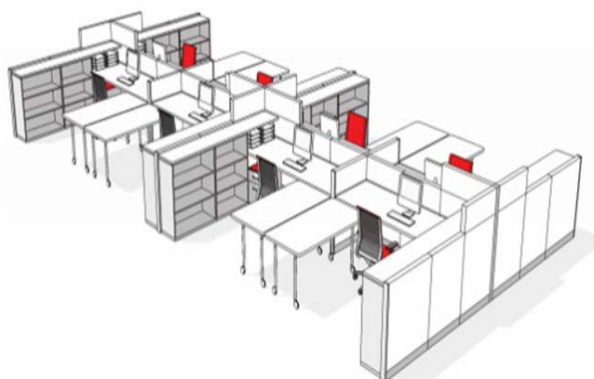
The images on the following pages are example of new approaches to office design that respond to the new ways of working, storing and communicating projects, files and ideas.

- Lower partitions for collaboration
- Mobile furniture for team meetings (lower right)
- Shared standing height work area for layout and meetings

Sample 6 x 8 Workstations with Layout Tables



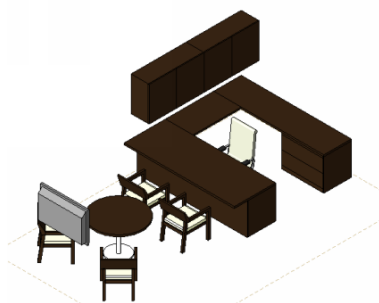
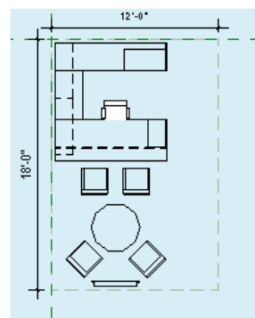
Sample 6 x 8 Workstations with 30" Mobile Tables



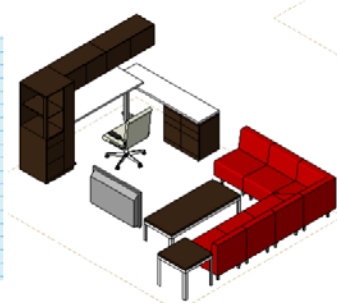
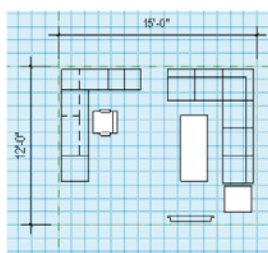
■ New Space Standards Approach - Sample Layouts For Offices

- Traditional office has larger desk and small, somewhat cramped meeting area (lower left & next page)
- Non-traditional offices have smaller desks, but larger meeting areas with more casual layouts (lower right and next page)
- Non-traditional layouts accommodate similar functions in less space

12 x 18 Traditional Executive Office Layout



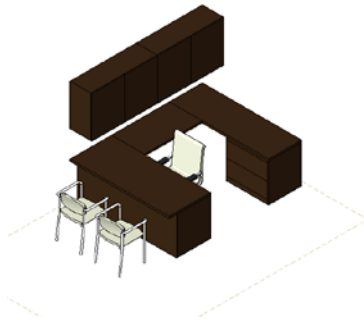
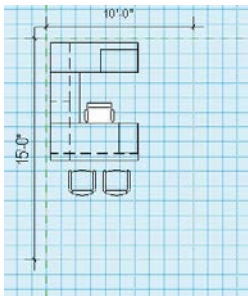
12 x 15 Non-Traditional Office Layout



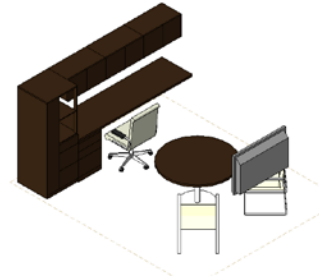
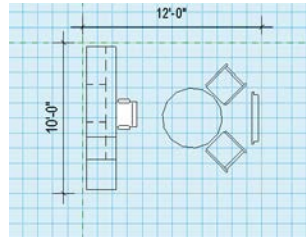


Space Allocation

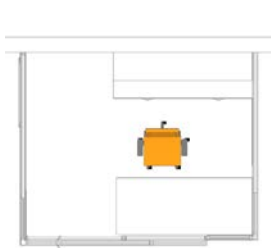
10 x 12 Traditional Office Layout



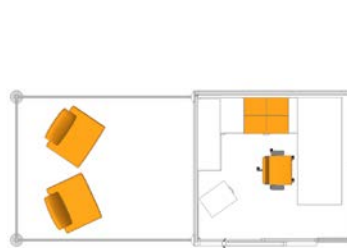
10 x 12 Non-Traditional Layout



10 x 10 Non-Traditional Shared Office Layout



8 x 8 Non-Traditional Shared Layout & Meeting Space



Space Allocation Recommendations

Move Toward Implementation of Revised Standards as Departments Move or Remodel

CBRE recommends that Milwaukee County revises current space standards to use on all new installations. In addition, as new work areas are designed, create a pilot space installation that can be used to demonstrate and test features that are programmed.

■ Purpose of creating a pilot space layout

- Evaluate space saving standards and features of layouts and furniture
- Gain endorsement from impacted employees moving into smaller space layouts
- Gather direct feedback from users
- Validate costs
- Verify if any existing workstations or stored units can be configured to the new space sizes

Recommendation

- Revise space standards and create a pilot space installation that can be used to demonstrate and test proposed features that are planned for future installations.
- Reuse existing systems furniture that can be recalibrated.



Space Allocation

■ Utilization benchmarks

- When comparing Milwaukee County utilization rates with similar organizations, it should be noted that the county has not moved or substantially altered the footprint of many of its departments for many years, so higher utilization rates have “carried over” and new standards have not been applied.
 - In addition, most of the primary office areas are in older buildings with many impediments such as light wells, wings with narrow floor plates, wide central corridors and large columns that hinder efficient layouts.
 - The “Utilization Benchmark” box to the right highlights that Milwaukee County can save space by reducing space allocations to match current standards for similar organizations.
 - The 334 SF/FTE “Per Suite Useable should be compared with the customer facing metric, while the 287 SF/FTE can be compared with the targets in the 154 – 157 SF/FTE range.
 - A separate study should be completed to update the space standards and utilization outlined in the 1) 2009 Milwaukee County Space Allocation report, 2) planning report 2002 for the Courthouse and 3) the planning reports from 1992/2008 for the Safety Building to determine the best strategy and optimal capacity for these buildings. Space in the Criminal Justice Facility should be included in this assessment.
- Utilization Benchmark**
Utilization benchmark: Useable SF/FTE

 - County Core Buildings:
 - Per Net Useable Area 287 SF/FTE
 - Per Suite Gross Area 334
 - GSA Target (1): 157
 - State Report Targets (2):
 - Admin Space 154
 - Call Center 105
 - Customer Facing 180

1) House Committee target for GSA
2) Recent state strategy recommendation completed by CBRE
- Proposed Space standards are highlighted below.
 - Many current layouts have spaces that are larger than the 2009 Milwaukee County Space Allocation standards. The “Transition” standards below are meant to gain acceptance of changes in standards, however, the more rapidly the County moves toward lower standards, the more quickly savings will accrue to the occupancy cost savings in the real estate portfolio.
 - “Goal” standards should be considered. The 180 SF office size could also be considered for downsizing to 120 SF as was recently recommended to a large state.

Space Allocation Summary

Proposed Space Allocation by Position Categories				2009 Proposed	Transition	Goal
Code	Position Type or Category	Constructed or Open Office	Job Title	Allocated Workspace Area (SF)	Workspace Area (SF)	Workspace Area (SF)
A	Executive	C	Elected Official	216	180	180
B	Administrator	C	Division Head	192	150	120
C	Managers	C	Deputy Director	160	150	120
D	Managers	C	Executive Director 2 & 3	144	120	120
E	Supervising Professionals	O	Supervisor 2 & 3 Section Heads	96	48	48
F	Architect/ Engineer	O	Space fo Large Plan Layout	72	48	48
G	Professional General	O	Clerical/Fiscal/Accnt/Admin 1	64	48	48
H	Professionals with Confidentiality Needs	O	Confidential w/No Conf Access; Attorney, HR; EAP/AAP	120	120	120



Space Allocation

Office Free Environment Alternative

- While the previous table indicates a progressively smaller footprint for offices and workstations, some organizations are going without offices.
- Both the Mayor of New York and the head of the General Services Administration sit in a workstation.
- Ample meeting areas and private areas must surround the workstations to be successful.
- An office-free work area is being chosen by some organizations to reduce occupied square footage

Mayor Bloomberg in His "Office" (2nd row)



Photo Credit: NY Times; Librado Romero

Workplace Strategies Savings Potential

Savings in Dollars and Square Footage Are Possible From Revised Standards

Many areas within the existing footprint can be reprogrammed to save space.

- CBRE tested the use of the "Goal" Standards in an Excel model . Replacing the cubicle and office sizes in the Courthouse Building with the revised sizes in the "Goal" standards noted above reduced the useable area per square foot by 12%.
- Additional savings are possible with a desk sharing model. If 20% of the workforce is mobile or teleworks, a 2:1 desk sharing ratio would reduce the need for an additional 10% of the desk space.
- Reducing file storage area from the current 8% to a target of 4% would free up 4% of the identified suite area. Additional file storage in underutilized areas would free up additional space.
- Shared spaces such as waiting areas can also be consolidated as departments further increase utilization.

Space Standards Benchmark

Sample % Reduction Scenarios

- Use of Goal Standards: 12 %
- Desk Sharing (1): 10 %
- File storage reduction (2): 4 %

- 1) Assumes 20% of staff desk sharing 2:1
- 2) Assumes 50% reduction in current space

Limitations

Reprogramming major Core Campus buildings will enable the County to capitalize on existing space in the preferred location for its buildings. The proposal has to address limitations both fiscal and architectural. The following list provides an assessment of the challenges that are caused by increased building utilization.

- Funding – Sources need to identified for the following:
 - Remodeling Core Campus properties
 - Providing workstation alternatives for mobile workers and tele-workers
- Structural
 - Some buildings or portions of buildings may require moderate structural upgrades



Space Allocation

- HVAC, Plumbing and Lighting
 - Increasing building densities typically requires additional upgrades to HVAC , plumbing and lighting equipment to handle additional people in the same space.
- Parking
 - Parking ratios rise with the increased use of space
 - Despite the increased use of the space, the need for additional parking is not a 1:1 requirement. The increased use of space is moderated by the fact that all occupants are not likely to show up me day for work.
- Fire and Life Safety
 - Additional points of egress and widened stair wells may be required for higher occupancy use.
 - Fire suppression and alarm systems upgrades may be required.

Benefits - GSA Case Study

Restacking and consolidating space in owned buildings will dramatically reduce excess real estate spend, improve worker productivity, enhance security and maximize use of scarce capital expense dollars. The General Service Administration (GSA) case study on the next page illustrates the renovation prototype used in the remodeling of the GSA's 1917 vintage headquarters. The 665,000 square foot office building has narrow floor plates similar to sections of the Courthouse and Safety Buildings. When completed, the project will contain roughly 800,000 square feet and house nearly 6,000 employees.

Key attributes in the success of the project are:

- Collaboration – Changing the mindset concerning how people work
- Administration of mobile and remote (work-at-home) workers – Change management is critical to success
- Technology enabling mobility – Employees need the tools to satisfy their job requirements
- Project Link: <http://www.gsa.gov/portal/content/119907>

GSA Headquarters Pilot Study

1800 F Street NW; Washington, DC

- Space Reduction for pilot
 - 42% space reduction over existing space
- Cost
 - Payback < 3 years
- Occupancy
 - Plans call for occupancy increase from 2,400 employees to 6,000 when entire project is completed



Space Allocation

Benefits - GSA Case Study



CENTRAL OFFICE RPAM PROTOTYPE Public Buildings Service | Hoteling | Free-Address

The Central Office RPAM Prototype (living lab) was developed through an integrated requirements development and design effort between GSA management, employees, consultants, furniture manufacturers and vendors, contracting staff, and facilities staff. The process included a user survey, focus groups, a management visioning session, management interviews, a town hall meeting, and planned post-occupancy evaluations.

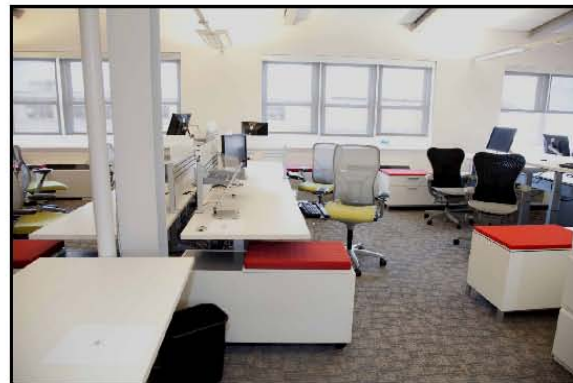
The new space, located at 1800 F, Suite 7300, houses 87 FTE in space previously occupied by 43 FTE, in an activity based work environment that supports a variety of work-styles, with 46 full-size 6' x 3.5' workstations, 18 small 4' x 3.5' touchdown workstations, 9 quiet area workstations, open and enclosed meeting spaces, quiet/focus rooms, personal and group filing and storage, and a break area with table seating, soft seating, and kitchen facilities.

Project Drivers

- June 2010 Presidential Memo
- Telework Enhancement Act
- Administrator's Challenge
- Technology enabling mobility
- Carbon footprint reduction
- A shift in how people work (collaboration)

Project Goals

1. Create a place where people want to come to work
2. Provide a professional workplace
3. Encourage and support collaboration
4. Improve productivity
5. Create Energy savings
6. Improve the utilization of real estate



The RPAM Workplace Prototype is designed to:

- Support mobile work from anywhere when appropriate.
- Support a "hoteling" office environment where staff reserve unassigned workstations as needed.
- Provide an "activity-based" work environment that supports varied workplace needs with appropriate spaces, including:
 - ◊ Open office workstations (reserved); Open office touchdown stations (unreserved); Quiet area workstations.
 - ◊ Open meeting space, formal and informal; Enclosed meeting space (both reserved and unreserved)
 - ◊ Neighborhood activity centers with open meeting space and storage
 - ◊ Small private rooms (phone booths)
 - ◊ Personal and group filing and storage
 - ◊ Exterior workspace on the terrace
 - ◊ Break area with table seating, soft seating, and kitchen facilities

Neighborhoods

- Six specific work groups are each assigned an open area meeting table and group specific filing which they "own".
- Workstations adjacent to the team meeting tables can support varied numbers of team members and allow for expansion and



Space Allocation



contraction of team use as needed.

Change Management: Efforts to help the staff adapt to the new work environment included:

- Employee Space Advisory Committee to participate in design and space management.
- Regular communications and information sharing.
- All-hands meetings.
- Protocol Committee to develop space use guidelines.
- Manager training to assist in managing remote work.
- Open houses to provide space information, transition assistance.

Technology: To support mobile, collaborative work, both in and outside the office, including:

- Laptop computers for all staff.
- Wireless computer connection throughout space, including outdoor terrace.
- Cisco Voice-over-Internet Protocol (VOIP) "soft" phones on computers
- No desktop phones or docking stations needed.
- Virtual Private Network (VPN) and Citrix for remote network access with office laptop or any other computer.

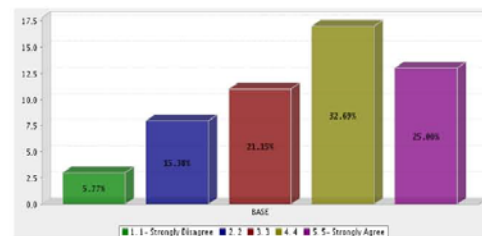
Concept Drawing from Studios Architecture

- Monitor arms and keyboard trays for ergonomic support.
- Google suite of cloud-based collaboration tools.

Results

The occupants have been in the space since August 15, 2011 and survey results show great satisfaction with the space, 79% of survey respondents gave a 3 or higher rating (on a 1-5 scale) when asked whether the environment supports their personal productivity.

Do the individual work space choices available in 7300 adequately support your personal productivity ?



Other areas of the survey show great satisfaction with work space furnishings and choices.

As an occupant of the space said "This new space is setting a higher-bar for the federal government not just through reducing space, but also by increasing collaboration and making the work place a great place to go and work".

42%	33 _{Tons}	\$281 _{Thousand}	< 3 _{years}	\$2,200
Space Reduction (From 15,900 USF to 9,200 USF)	Est. annual CO2 savings (Using CWS Carbon Calculator)	Potential annual rent savings (\$42 USF)	Payback	Approx. cost of each workstation

FOR MORE INFORMATION OR TO REQUEST A TOUR, CONTACT THE CENTER FOR WORKPLACE STRATEGY



Space Allocation



Organization & Process
Near Term - Priority 1

Implement Electronic Document Management

Conversion of hard copy paper files to electronic versions stored on-line in a searchable database accessible to authorized users from their desktop computers.

PROPOSED SOLUTION

- Digitize all files for all agencies and maintain electronically for savings.

BENEFITS

- Reduces leased space for storage of documents over time for savings.
- Assures fidelity and control of real estate documents in the facilities group.

Current Status

- The county currently has contractors doing some document scanning, is rolling out a document management system and an accounts payable system.
- In many locations, file cabinets and boxes full of old documents were observed stacked in empty cubicles, hallways, offices, etc.
- The courts have extensive legal files that are mostly paper.

Risks/Costs

- The risk in employing such an electronic document storage system is not the loss of fidelity with documents, but rather maintaining those files electronically on a consistent basis.
- There will be significant cost associated with digitizing paper files.

Assumptions

- Funding can be accelerated to scan documents across all departments.
- Space currently used for filing can be recovered for use as viable office space, resulting in further consolidation and collocation.



Workplace Solutions
Medium Term - Priority 1

Review/ Revise /Implement Space Standards

Establish office and workstation space standards to be used across portfolio. Study industry benchmarks for best in class equivalents.

PROPOSED SOLUTION

- County Standards compare favorably when compared to industry benchmarks. However, private sector averages are falling, so standards should be benchmarked to determine the benefit of a change in standards.
- Standards likely to be revised downward to **XXXXX** SF/person due to the impact of technology and changing work requirements.
- The impact on current furniture systems should be considered.
- Align job descriptions and functions with new standards

BENEFITS

- Application of new standards will result in smaller footprint and reduce occupancy costs.

Stabilized Savings: Lower occupancy costs.

Payback: Immediate for new or moved locations.

Current Status

- A sample analysis of the Courthouse indicated a utilization rate over 300 square feet/ person. Most organizations are driving to useable rates under 200 SF/person.
- Similar to many organizations with a variety of space types and long tenured occupancies, the county has departments that do not adhere to current standards.
- Over time, different office and workstation sizes have been used resulting in inefficiencies.

Risks/Costs

- A review of standards has no risk.
- Costs can become prohibitive if revised standards are implemented immediately and across all departments.
- Current workstations and furniture may not "fit" new standards and result in increased costs if the policy requires all new furniture.
- Cultural resistance to change.
- Revision downward can be seen as a threat to employee status/position.

Assumptions

- Practical application of the policy should take into consideration the status and condition of existing furniture.
- Space standards should simplify the number and type of offices and workstations to minimize space reconfiguration when staff is moved.



Space Allocation



Workplace Solutions
Medium Term - Priority 1

Restack Inefficient Owned Buildings

Eliminate vacant space in portfolio. Audit facilities to identify inefficiencies and pocket vacancy. Develop stacking and/or space plans to consolidate vacant space for disposition or efficient re-use.

PROPOSED SOLUTION

- Evaluate county owned space to determine where efficiencies may be gained.
- Prioritize agency opportunities and relocate to the CBD where possible.

BENEFITS

- Captures and reports relevant data.
- Supports consolidation, co-location and expense reduction directives.
- Provides a baseline so further studies become embedded and routine to perform.
- Adds the programming component to the SOM's policies and procedures.
- Reduces the amount of leased space.
- Reduces occupancy expenses.
- Improve decision making and flexibility.



Current Status

- The county does not have good baseline data for how much space is actually occupied and/or whether or not space allocation meets space use policies and standards.

Risks/Costs

- Space audit of facilities will take time to evaluate and report.
- Space programming and research requires an expense commitment for architectural services and time commitment from internal staff.
- If vacant pockets are identified will agencies be able to reconfigure and relocate given existing budgetary restraints?
- Need to identify funding source for restacking of space.

Assumptions

- Inefficiency known to exist.
- Necessary first steps are:
 - Determine highest and best use for county owned space
 - Establish an online vacancy reporting system
 - Perform cost-benefit analysis to restack spaces.



Page 1



Workplace Solutions
Long Term - Priority 1

Utilize Alternative Workplace Solutions

Consider alternative workplace solution wherein employee performance (not time spent in office) is key indicator. Flexible shifts, virtual offices, hoteling, etc. might be more cost effective and environmentally friendly (green) than dedicated and under-utilized office space (sustainability).

PROPOSED SOLUTION

- Modernize workplace environments through the use of technology, furniture, color selection, and sustainable practices.
- Implement hoteling and telecommuting to respond to changing agency needs as it relates to servicing the customer.
- Evaluate employee performance based upon results - not time spent in office
- Align department goals with performance based outcomes.

BENEFITS

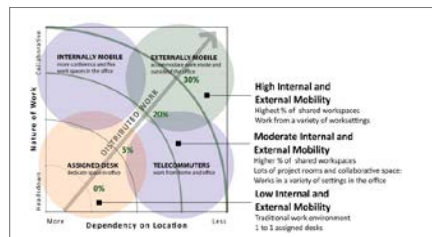
- Reduces the need for expensive office space.
- Aligns responsibilities with cross generational work force.
- Improves employee morale.
- Places personnel in close proximity to assignment.

Current Status

- While Milwaukee County has selected staff that have laptops and may do some work at home, there is no formalized policy for mobile work.
- The principal "workplace solution" recommendation is to develop a formalized policy for field personnel to work from home, in client department space or out of automobiles/trucks. This action eliminates the need for expensive office space and allows for employees to be closer to their assignments and/or customer base

Risks/Costs

- Managing employees remotely can pose supervisory challenges
- The county must be able to invest in:
 - Transportation
 - Do employees have access to county vehicles?
 - Technology
 - Do employees have access to cell phone and computer to perform tasks remotely?



Assumptions

- Typical departments where this strategy may apply are as follows: 1) law enforcement, 2) parks and 3) human services.



Space Allocation



Workplace Solutions
Medium Term - Priority 1

Conduct Portfolio Space Efficiency Analysis and Benchmark Study

Complete comprehensive analysis of space utilization, including benchmarking space to industry standards.

Current Status

- The county is currently not tracking facility utilization on an ongoing basis.
- Typically many agencies have not validated their current and/or future space needs. Most spaces have not been reviewed and reprogrammed since initial occupancy. As such, agencies are likely occupying more space than necessary.

Risks/Costs

- No risk in capturing the data.
- Minimal cost if in-house sources such as payroll data and agency reporting can be used to determine space efficiency.
- There will be a higher cost to use a facilities tracking system tied to enterprise software.
- Employee/agency concerns about changing space standards.

Assumptions

- Need to make allowances for non conventional spaces such as corrections facilities, hearing rooms, etc.
- Benchmarking will require the capture of employee, vendor and temporary staffing data that is not currently available.

Conduct Portfolio Space Efficiency Analysis (continued on following slide)



Workplace Solutions
Medium Term - Priority 1

Conduct Portfolio Space Efficiency Analysis and Benchmark Study

Complete comprehensive analysis of space utilization, including benchmarking space to industry standards.

PROPOSED SOLUTION

- Required data can be captured through several sources including HR payroll information, facilities walk-throughs and agency reporting. Data should be required annually.
- Process for validating data needs to be implemented and updated annually.
- Initially target courthouse complex for restacking and consolidation.
- Validate and/or re-program all spaces over 10,000 SF.
- Reduce space standards to less than XXX square feet per person.

BENEFITS

- Determines actual space needs and compares to modern industry standards.
- Identifies opportunities for immediate cost savings through more efficient space utilization.
- Achieves relocations to the Central Business District.
- Reduces lease expense.
- Maximize use of county owned space.

One-Time Costs: Space tracking system if more advanced tracking is desired.

Payback: Immediate if space can be back-filled through efficient use.

Strategy

Plan and restack to provide more efficient workspaces and reduce vacancy

Positive Impact



Cost Reduction	●
Business Agility	●
Environment Footprint	●
Employee Engagement	◐
Productivity	○

● High Impact ◐ Moderate Impact ○ Low Impact ◑ Adverse Impact



Building Inspections

BUILDING INSPECTIONS OVERVIEW

The CBRE Team completed walking inspections of 25 properties to assess the overall conditions and operations of real estate in the portfolio. A detailed review of each property can be found in the Appendix Supplement.



Building Inspections

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Building Inspections

PROPERTY INSPECTIONS

Inspections Approach

The CBRE Team performed a physical property inspection of key properties (25 walk-throughs), an operations assessment of current real estate practices, an operating expense review and a strategic analysis of options based on the information gathered and interviews with key stakeholders. The space surveyed includes over 50% of the non-special use space (over 3.6M SF; excludes museum, jails, airport, parks and zoo) owned by Milwaukee County. While a significant number of building deficiencies including life safety issues were noted, the scope of this study did not include analysis of structural members, an assessment of hidden conditions or a complete code comparison of “as built” features.

- Overall Facility condition
- Functionality/Utilization
- Operational Issues
- Major Capital Requirements
- Health and Safety Compliance (as noted above)
- Highest and Best Use

Property Inspection Summaries

This section provides an overview of the 25 properties that were reviewed with physical inspections. Appendix E (in a separate book) contains detailed summaries of the 25 properties.

Courthouse – Courthouse Complex (ID: 10)

901 North 9th Street

- Background Data
 - Square Feet: 1,021,000
 - Year Built: 1932
- Overall Building Condition
 - The courthouse has a substantial need for building upgrades throughout including HVAC, lighting, electrical, windows, signage and interior finishes
 - Capital projects are being carried out on an ongoing basis (steam controls, windows, façade repair, etc.) but often in small increments such as the replacement of windows
- Functionality/ Utilization
 - Functionality is constrained by several inherent design features including light wells with exterior exposure that penetrate the building, large central corridors that bisect the building and other areas such as mezzanines that are more remote (poor access and circulation) and underutilized..
 - Functionality and utilization can be improved with through an assessment of storage practices, underutilized space and a move toward the implementation of revised space standards as spaces are remodeled.

Courthouse





Building Inspections

■ Operational Issues

- Many random areas are being used for storage (furniture, books, light bulbs, parts, shelving components, old doors, etc.). These items are both an impediment to operations and may be a safety issue and should be cleaned out. A decision should be made concerning the disposition of stored materials. Sizeable stored materials should be warehoused.
- Some jury room areas are not handicapped accessible
- Many building doors do not have ADA compliant hardware

■ Major Capital Requirements

- As the most high profile and heavily used facility, the County should move forward with a top to bottom review of required capital required to stabilize and improve operational aspects of the building.
- Most of the HVAC and plumbing systems are nearing the end of their useful life
- Building does not have a sprinkler system

■ Safety

- Paint shop is not separated from mechanical and electrical equipment rooms
- No sprinkler system in open stair wells
- Adequate signage

■ Highest & Best Use

- Continued operations as a courthouse

■ Summary

- As the largest and most high profile facility, the County should focus on maximizing space use, allocation of capital and planning dollars to deliver the most value to the County
- Occupancy planning for the Courthouse facility should be coordinated with plans for other nearby County facilities including the Safety Building and Criminal Justice Facility

Criminal Justice Facility (CJF) – Courthouse Complex (ID: 76) 949 North 9th Street

■ Background Data

- Square Feet: 475,000
- Year Built: 1992

■ Overall Building Condition

- Overall the building is in good condition, however, many of the HVAC system components are nearing the end of their useful life and will need to be replaced
- While this is a relatively new facility, it shares the same lack of routine maintenance scheduling that is apparent in older facilities

Criminal Justice Facility





Building Inspections

- **Functionality/ Utilization**
 - Adequately serves jail and public safety functions
 - Opportunity to evaluate floor utilization in office areas – appear underutilized
- **Operational Issues**
 - Deferred maintenance including inoperable front doors
 - This building is a primary component of the courts and criminal justice facilities which should be looked at holistically to determine the optimal layout and adjacencies to increase functionality, security and services
- **Major Capital Requirements**
 - Upgrades to HVAC, domestic water and electrical components is recommended
- **Safety**
 - The fire alarm system while still in good condition, should eventually be upgraded to be coordinated with the court house system.
 - Furniture stacked in exit corridors
- **Highest & Best Use**
 - Continued use as the Criminal Justice Facility
- **Summary**
 - It is apparent that general maintenance of equipment and selected interior finishes have not been routinely performed or upgraded since the building was built.
 - The building is generally in good condition, but it needs to have maintenance items scheduled and repaired

Safety Building – Courthouse Complex (ID: 30)

821 West State Street

- **Background Data**
 - Square Feet: 296,000
 - Year Built: 1928
- **Overall Building Condition**
 - A significant amount of area on each floor contains unoccupied former jail space, some of which is in poor condition and underutilized.
 - A portion on the third floor is scheduled to be renovated into office space, but the majority is unused.

Safety Building





Building Inspections

■ Functionality/ Utilization

- Office and courtroom areas in the non-jail portion of the building are functional but dated and not well maintained
- The building consists of several different, but connected operations with different floor heights and transitions with ramps between different elevations

■ Operational Issues

- If remodeled, the unused jail occupies space that could house other county operations including courts and office areas
- This building is a primary component of the courts and criminal justice facilities which should be looked at holistically to determine the optimal layout and adjacencies to increase functionality, security and services
- There are handicapped accessibility issues for some of the public restrooms

■ Major Capital Requirements

- The building has both cosmetic (paint and carpet) and major capital deferred maintenance
- A decision should be made regarding the future status of this building before additional major capital is budgeted,
- However, the feasibility of converting the former jail areas to office or courts should be re-examined (was reviewed in 1992/2008) as the location of this building ideal for Milwaukee County functions

■ Safety

- Corridors used for storage block egress paths
- Walls are opened up when pipes burst causing exposed asbestos which is abated at time of work but remaining condition is unsafe
- Exterior steps are deteriorating and handrails rusting could cause hand slivers, trips, etc.

■ Highest & Best Use

- The Highest and Best Use of the site may be for continued County operations in the existing building.
- If demolished, the site is still a prime location for a consolidation facility for County departments
- Capital expenditure estimates need to be developed to determine if the building is suitable for continued occupancy

■ Summary

- After reprogramming major County facilities, the building should be assessed to see if it is cost effective to renovate the facility to accommodate additional departments
- If cost prohibitive to remodel, the site should be considered for construction of a new facility to house departments related to core County functions



Building Inspections

Community Correctional Center (ID: 35/37)

1004 North 10th Street

Community Correction Center



- Background Data
 - Square Feet: 75,544
 - Year Built: 1930's
- Overall Building Condition
 - Currently boarded up and not used
 - Crumbling concrete, rusted exterior railings and miscellaneous metal
- Functionality/ Utilization
 - Former St. Anthony's Hospital – Code violations caused "Huber" jail to close
 - Not currently functional for any County use
- Operational Issues
 - Abandoned
 - State inspectors have given the building 30 code violation citations
- Major Capital Requirements
 - Elevators, HVAC and other major components are old, out of service and would need to be totally replaced
- Safety
 - Deterioration of the building is a major safety issue
- Highest & Best Use
 - Vacant land value
 - Should be zoned for uses compatible with the court house area uses
- Summary
 - The existing building should be demolished
 - The remaining vacant parcel may be used for parking, court consolidation or related County functions or it could be sold. We recommend holding until details of Core Campus plan are finalized.





Building Inspections

Medical Examiner (ID: 37)

1004 10th Street

■ Background Data

- Square Feet: 73,830
- Year Built: 1974

■ Overall Building Condition

- The property has deferred maintenance issues including a need for masonry repair, deteriorating walks/driveways, open ceiling tiles due to pipe leaks, air conditioning breakdowns, basement water damage from a roof leak (now repaired) and water damage and corrosion around walls and window/door frames.
- Interior surface finishes are modest but in good repair
- Leaking roof problems have been repaired for now

■ Functionality/ Utilization

- Examiner's functions are housed in former hospital operating room, pharmacy and radiation spaces
- The structure is connected to the vacant Community Correctional Center

■ Operational Issues

- Refrigeration units have operated near capacity and are shared between both facilities
- Dark entrances and overhangs encourage loitering

■ Major Capital Requirements

- All major HVAC, electrical and plumbing systems should be upgraded or replaced

■ Safety

- Overall building deterioration including water damage from a roof leak (now repaired) and aging systems create air-borne hazard issues from mold and pest infestation
- Corridors use for storage create exiting hazard
- Exterior step deterioration creates a trip hazard

■ Highest & Best Use

- Demolish building to capture land value

■ Summary

- Building should be demolished
- County should consider combined facilities with city and state operations

Medical Examiner





Building Inspections

McGovern Park Senior Center (ID: 1435)

5400 North 51st Boulevard

■ Background Data

- Square Feet: 12,983
- Year Built: 1974

■ Overall Building Condition

- Overall the building is in good condition, but deferred maintenance items need to be addressed before they create larger problems

■ Functionality/ Utilization

- Serves the functional needs of the senior center operation

■ Operational Issues

- Many systems while functional are nearing the end of their useful life

■ Major Capital Requirements

- Primarily to upgrade systems
- Exterior work includes need for windows, caulking, tuckpointing and gutters

■ Safety

- The location has security issues - break-ins
- Exit doors lack panic hardware

■ Highest & Best Use

- Continued use as a senior center

■ Summary

- Deferred maintenance items need to be scheduled and budgeted
- With repairs, this center should continue to serve as a senior center for many years

McGovern Park Senior Center



Rose Park Senior Center (ID: 1830)

3045 North Martin Luther King Drive

■ Background Data

- Square Feet: 39,474
- Year Built: 1982

■ Overall Building Condition

- Overall the building is in good condition
- Many systems while functional are nearing the end of their useful life

Rose Park Senior Center





Building Inspections

- **Functionality/ Utilization**
 - Some restrooms are not ADA compliant
- **Operational Issues**
 - Many systems while operational are nearing the end of their useful life
- **Major Capital Requirements**
 - Primarily to upgrade systems
 - Exterior maintenance issues include walkways, front entrance, leaking roof and tuckpointing
- **Safety**
 - Exit doors need panic hardware
 - Some exits are locked all day
- **Highest & Best Use**
 - Continued use as a senior center
- **Summary**
 - Deferred maintenance items need to be scheduled and budgeted
 - With repairs, this center should continue to serve as a senior center for many years

Washington Park Senior Center (ID: 1990)

4420 West Vliet Street

Washington Park Senior Center



- **Background Data**
 - Square Feet: 30,092
 - Year Built:
- **Overall Building Condition**
 - Overall the building is in good condition
 - Many systems while functional are nearing the end of their useful life
- **Functionality/ Utilization**
 - Some restrooms are not ADA compliant
 - Adequately serves the senior center function
- **Operational Issues**
 - Many systems while operational are nearing the end of their useful life
- **Major Capital Requirements**
 - Primarily to upgrade systems
 - Exterior maintenance issues include walkways, front entrance, leaking roof and tuckpointing



Building Inspections

- Safety
 - Building has no fire sprinklers
- Highest & Best Use
 - Continued use as a senior center
- Summary
 - Deferred maintenance items need to be scheduled and budgeted
 - With repairs, this center should continue to serve as a senior center for many years

Wil-O-Way “U” Recreation Center (ID: 2680)

10602 West Underwood Creek Parkway

- Background Data
 - Square Feet: 8,975
 - Year Built: 1964
- Overall Building Condition
 - Overall the building is in good condition.
- Functionality/ Utilization
 - Adequately serves the functions of the Department of Family Care
 - Provides 3rd party rental income
- Operational Issues
 - Most HVAC components were recently upgraded
 - Electrical upgrades to lighting fixtures would save energy
- Major Capital Requirements
 - Portions of the building have been remodeled
 - Some deferred maintenance and systems lifecycle replacement issues
- Safety
 - Cracked curb/sidewalk trip hazards
- Highest & Best Use
 - Continued use as a multi-use park facility
- Summary
 - Deferred maintenance items need to be scheduled and budgeted
 - With repairs, this center should continue to serve as a multi-use park facility for many years

Wil-O-Way “U” Recreation Center





Building Inspections

Wil-O-Way “U” Wading Pool (ID: 2681)

10602 West Underwood Creek Parkway

- Background Data
 - Square Feet: 1,808
 - Year Built: 1964
- Overall Building Condition
 - Wading pool needs repairs to fix leaks
- Functionality/ Utilization
 - Can serve the function, but does it provide a substantial enough amenity to justify the cost and continued expense?
- Operational Issues
 - Needs repairs to function
- Major Capital Requirements
 - Repair leaks
- Safety
 - Needs anti-slip pool bottom
 - Need to confirm if it meets Virginia Graham Baker Act
- Highest & Best Use
 - Wading pool
- Summary
 - Can serve the function, but does it provide a substantial enough amenity to justify the cost and continued expense?

Wil-O-Way “U” Wading Pool



Wil-O-Way “G” Recreation Center South (ID: 2950)

207 South Lake Drive

- Background Data
 - Square Feet: 10,509
 - Year Built: 1981
- Overall Building Condition
 - Overall the building is in good condition
 - Recently installed three season room, kitchen cabinets and roof
- Functionality/ Utilization
 - Works well for party rentals and events
 - Generates 3rd party revenue from Goodwill operated adult day care

Wil-O-Way “G” Recreation Center South





Building Inspections

- Operational Issues
 - Adequately serves the recreational and adult day programs it services
- Major Capital Requirements
 - Exterior maintenance includes painting and door and window repairs
 - Heating and air handling units are beyond their useful life
- Safety
 - Main water service is next to electrical service equipment
 - Need to monitor effectiveness of fire alarm system
- Highest & Best Use
 - Continued use as a multi-use park facility
- Summary
 - Schedule deferred maintenance repairs
 - Continue to operate as a multi-use park facility

Kelly Nutrition Center – Warnimont Park (ID: 3125)

5400 South Lake Drive

- Background Data
 - Square Feet: 4,290
 - Year Built: 1955
- Overall Building Condition
 - Built as barracks housing, the concrete block/wood joist structure was not intended for long term use
 - The building is constructed of block walls, wood joist roof, wood doors and windows which are thermally inefficient to meet today's energy standards. It has had minimal maintenance and thermal upgrades.
- Functionality/ Utilization
 - There is no curb appeal or amenities that would attract more users given the age and aesthetics of this building.
 - Large underutilized corridors reduce useable square footage
- Operational Issues
 - The building layout and proportions make it difficult to remodel into larger spaces to meet the needs of the various programs that are offered by the County.
 - Two building layout including two kitchens, makes it difficult for staff and users to traverse outside between buildings especially in inclement weather.
 - Door hardware is not ADA compliant

Kelly Nutrition Center





Building Inspections

- Major Capital Requirements
 - Need to replace hot water, heating, air conditioning and ventilation equipment
 - Wood windows need replacement
- Safety
 - Separate buildings hampers safe navigation between buildings during winter months, security all year
 - No stoops at exterior doors causes pavement settlement at door thresholds
 - Older wood double-hung windows are heavy and difficult for elderly to open. Could drop and cause injury
- Highest & Best Use
 - Building need substantial repairs and is poorly laid out to service elderly users
 - Need to question making required repairs or replacing facility
- Summary
 - Recommend demolishing structure and consolidation of the senior center and nutrition center in a new facility possibly as part of a development structure that gives a private operator incentives to build. Need to coordinate with Parks Department.

Kelly Senior Center – Warnimont Park (ID: 3130)

5400 South Lake Drive

- Background Data
 - Square Feet: 10,300
 - Year Built: 1954
- Overall Building Condition
 - Built as barracks housing, the concrete block/wood joist structure was not intended for long term use
 - The building is constructed of block walls, wood joist roof, wood doors and windows which are thermally inefficient to meet today's energy standards. It has had minimal maintenance and thermal upgrades.
- Functionality/ Utilization
 - There is no curb appeal or amenities that would attract more users given the age and aesthetics of this building.
 - Large underutilized corridors reduce useable square footage
- Operational Issues
 - Two building layout including two kitchens, makes it difficult for staff and users to traverse outside between buildings especially in inclement weather.
 - Door hardware is not ADA compliant

Kelly Senior Center





Building Inspections

- Major Capital Requirements
 - Deferred maintenance items need to be scheduled for repair or replacement
- Safety
 - Separate buildings hampers safe navigation between buildings during winter months, security all year
 - No stoops at exterior doors causes pavement settlement at door thresholds
 - Older wood double-hung windows are heavy and difficult for elderly to open. Could drop and cause injury
 - The local Fire Inspector requested a second means of egress be provided in large hall per building code requirements
- Highest & Best Use
 - Building need substantial repairs and is poorly laid out to service elderly users
 - Need to question making required repairs or replacing facility
- Summary
 - Recommend demolishing structure and consolidation of the senior center and nutrition center in a new facility possibly as part of a development structure that gives a private operator incentives to build a combined senior center with elderly housing. Need to coordinate with Parks Department.

Wilson Park Senior Center – Wilson Park (ID: 3845)

2601 West Howard Avenue

- Background Data
 - Square Feet: 38,458
 - Year Built: 1980
- Overall Building Condition
 - Overall the building is in good condition, however, some HVAC and plumbing components are nearing the end of their useful life
- Functionality/ Utilization
 - The building contains many amenities that that serve the needs of the senior citizens who use the facility
- Operational Issues
 - Many of the HVAC components are beyond their useful life
- Major Capital Requirements
 - Wood siding is coming loose in many locations
 - Need to schedule repair and replacement of selected building components

Wilson Park Senior Center





Building Inspections

■ Safety

- Building does not have fire sprinklers
- Accessible curb ramp has been patched and is crumbling – does not meet today's code and design standards
- Exterior doors should have single action / secure type panic devices rather than push bars with thumb turn locks. Thumb turns are not easily unlocked during a panic situation which can cause delays in egress during emergency situations
- Curbs, sidewalks and asphalt are cracked and buckling causing trip hazards, especially at elderly facility

■ Highest & Best Use

- Continued use as a senior center

■ Summary

- Deferred maintenance items need to be scheduled and budgeted
- With repairs, this center should continue to serve as a senior center for many years

Vel Phillips Juvenile Justice Center (ID: 5000) 10201 Watertown Plank Road

■ Background Data

- Square Feet: 219,539
- Year Built: 1962; with later additions through 1994

■ Overall Building Condition

- Overall the building is in good condition

■ Functionality/ Utilization

- Some ADA compliance issues with ramps and in restrooms

■ Operational Issues

- Appears to adequately service the uses housed in the facility

■ Major Capital Requirements

- Most of the deferred maintenance is cosmetic, however, major building systems need to be measured against their useful life and maintained accordingly.

Vel Phillips Juvenile Justice Center





Building Inspections

■ Safety

- Exterior concrete walks uneven, trip hazards
- Spawling / falling concrete from underside of concrete overhangs
- Parking and pedestrian conflicts in parking lots
- Fire alarm system has a heat and routing problem and should be replaced

■ Highest & Best Use

- Continued use as Juvenile Courts
- Courts administration and judicial interviews identified a desire to consolidate the courts into the space at the courthouse complex for greater efficiency

■ Summary

- The building is in relatively good condition and adequately serves the court function
- Longer term, the court function could be consolidated near the Courthouse. If the County develops a plan to consolidate this function, the property is should be marketable for a variety of commercial uses.

D-16 Mental Health Center Regional Medical Ctr. (ID: 5040) 9455 Watertown Plank Rd.

■ Background Data

- Square Feet: 425,400
- Year Built: 1978

■ Overall Building Condition

- Overall building condition is good
- Building is undergoing various upgrades

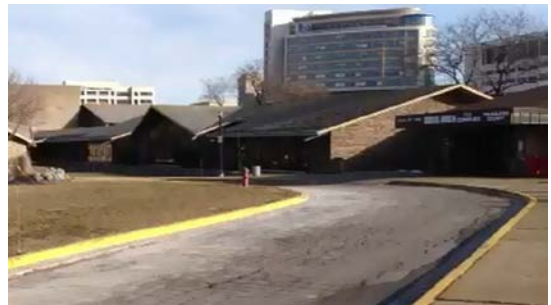
■ Functionality/ Utilization

- Functions as a mental health center, but layout is dated
- A patchwork of upgrades have addressed selected code items

■ Operational Issues

- Currently closing 24 beds and moving patients to community based facilities
- Need more private rooms in wards serving aggressive patients
- Higher than average utility costs

Mental Health Center





Building Inspections

- Major Capital Requirements
 - The mental health residential use requires many code upgrades to improve it to current standards
 - Steam district heating will be ended with pending road improvements. This will require HVAC upgrades
 - Many building system components have reached the end of their useful life
- Safety
 - Code requirements are forcing upgrades to many fixtures
 - Current standards for mental health facilities exceed the current conditions found at the Mental Health Center. Future plans for this facility need to consider cost and return on investment of upgrading the current building.
- Highest & Best Use
 - The facility sits on a highly desirable commercial site with good access and high visibility
 - Continued use as a day hospital at present, however, as the facility continues to shrink and capital costs to maintain facilities for a smaller population rise, the County should consider building a new downsized facility, possibly in conjunction with the Medical College of Wisconsin or other regional medical center activities.
- Summary
 - The County should explore options for the replacement of the facility with a downsized, more efficient and code compliant building

D-18 Food Service Bldg. Regional Medical Ctr. (ID: 5060) 9150 Watertown Plank Rd.

Food Service Building



- Background Data
 - Square Feet: 35,028
 - Year Built: 1957
- Overall Building Condition
 - Overall the building has many features and systems that are from the original construction
 - Many systems should be replaced
- Functionality/ Utilization
 - Kitchen dry food storage is on the second floor which creates kitchen inefficiencies
- Operational Issues
 - The facility is oversized for the current usage which has fallen with smaller patient loads at the mental health facilities
 - The building is not air conditioned



Building Inspections

- Major Capital Requirements
 - Many of the freezers are old and energy inefficient
 - Many of the building systems are nearing the end of their useful life
- Safety
 - Dangling chains and unsecured ladders pose safety issue for occupants
 - No air conditioning in food service environment lends to poor air quality and unsanitary air which enhances air-borne bacteria
 - Floor tile and pipe wrap assumed to be asbestos should be tested and abated
 - Exterior steps are deteriorating and handrails rusting could cause hand slivers, trips, etc.
 - Kitchen electrical outlets are not GFCI
- Highest & Best Use
 - The property could continue as a food service building for another user, but it might be used for another purpose with extensive remodeling
- Summary
 - The future use of this property depends on the status of the Mental Health complex, Day Hospital, CATC and senior centers that it serves
 - A more functional replacement facility may be constructed as part of a new Mental Health Facility – It should be a candidate for sale if replacement facilities include a new food service

D-19 Day Hospital – Regional Medical Ctr. (ID: 5070)

9201 Watertown Plank Road

- Background Data
 - Square Feet: 129,433
 - Year Built: 1968
- Overall Building Condition
 - Overall the building is in good condition but dated
 - Some water damage in the basement
- Functionality/ Utilization
 - No longer used as a day hospital
 - Rented out to private and non-profit groups for case management adolescent patient treatment
 - Use of recreation spaces has been abandoned or cut back due to shorter 7 day stays, down from 21 days
- Operational Issues
 - Rent from St. Charles was recently cut from \$35,000/ month to \$7,000/ month
 - Services provided at this location may be moved elsewhere

Day Hospital





Building Inspections

- Major Capital Requirements
 - Major HVAC components nearing the end of their useful life
 - Fire protection upgrades
- Safety
 - Dangling cables and unorganized work space could be potential safety concern
 - Loose and broken floor tile is a trip hazard
 - Recommend relocation of electrical box in room 127 as it is near waste lines and steam lines
- Highest & Best Use
 - The commercial land value of the location for medically related uses
- Summary
 - This facility should be evaluated in context of the overall County plan for Mental Health facilities including the adjacent Mental Health Center
 - We recommend exploring alternatives for current users of the facility and eventual sale of the complex

D-20 Child & Adolescent Treatment Center (CATC)

Regional Medical Ctr. (ID: 5080)

9501 Watertown Plank Road

- Background Data
 - Square Feet: 182,787
 - Year Built: 1973
- Overall Building Condition
 - The overall building condition is good, but it requires interior and systems upgrading
- Functionality/ Utilization
 - This property serves the Wauwatosa Schools, UW Extension and Milwaukee County EMS
- Operational Issues
 - No longer used for Adolescent Treatment, the property adequately serves the office uses
 - Many systems and interior finishes need to be upgraded
- Major Capital Requirements
 - HVAC systems beyond useful life
 - Sprinkler installation

Child & Adolescent Treatment Center





Building Inspections

■ Safety

- The exterior sidewalk, parking lot, and driveways are in very poor condition. The numerous cracks and unevenness in sidewalks create a potential tripping hazard and are a safety concern.

■ Highest & Best Use

- The commercial land value of the location for medically related uses

■ Summary

- This facility should be evaluated in context of the overall County plan for Mental Health facilities including the adjacent Mental Health Center
- We recommend exploring alternatives for current users of the facility and eventual sale of the complex

M-01 Technology Innovation Center (ID: 5290)

10437 Innovation Drive

■ Background Data

- Square Feet: 137,247
- Year Built: 1915

■ Overall Building Condition

- The overall building condition is good, but dated
- Deferred maintenance items include exterior windows/doors, paving, interior finishes and mechanical/electrical and plumbing systems

■ Functionality/ Utilization

- Most of the space is not conducive to current standards for incubator operations due to the load bearing masonry walls that without great expense prohibit the creation of large open spaces.

■ Operational Issues

- The building uses window air conditioning units which are less efficient and more costly than central air.
- Only some bathrooms and building entrances are handicapped accessible

■ Major Capital Requirements

- The building will lose access to a steam line that services the boilers when the Watertown Plank/Highway 45 interchange is re-built. Boiler replacement will be expensive.
- Potential upgrades include the fire alarm system, plumbing fixtures, domestic hot water, new boilers, central air conditioning and exterior doors and windows.

Technology Innovation Center





Building Inspections

■ Safety

- Basement emergency stairs have plant growth and busted concrete –concern with door opening fully and concrete causes trip hazard
- Roof access doors are unlocked – roof is not adequately protected for public use
- Old wood windows are not safe to operate
- Can't find replacement parts for fire alarm system

■ Highest & Best Use

- Given the age of the building and its location in a technology park, the Highest and Best Use is as a development site.

■ Summary

- The County should explore the viability of relocating current tenants to other nearby technology incubators and closing the facility.
- The building should be demolished and the site should be sold.

Marcia Coggs Human Services Center (ID: 5600)

1220 West Vliet Street

■ Background Data

- Square Feet: 222,482
- Year Built: 1920

■ Overall Building Condition

- The building is in generally good condition as many improvements have been made to the property
- State of Wisconsin occupies two of three floors

■ Functionality/ Utilization

- Poor access for elderly users of services
- Parking is in short supply

■ Operational Issues

- Very large and open floor plates accommodate open workstation layouts

■ Major Capital Requirements

- Many of the HVAC system components are at the end of their useful life

■ Safety

- Loading dock requires protective guardrails
- Open water service well in basement should have cover
- Neighborhood security is an issue





Building Inspections

- Highest & Best Use
 - Continued use as an office center
- Summary
 - If sufficient space can be found in the immediate Courthouse complex, approach the State to explore their interest in a possible purchase or negotiate a longer term lease with the State and then sell to a third party buyer.
 - Marcia Coggs sale value is dependent in part on the State of Wisconsin. A longer term lease signed by the State and/or County could increase its value in a sale to a third party buyer.
 - If additional space is needed to house staff from City Campus and other consolidation locations, increase capacity at the Marcia Coggs building using up-to-date workplace concepts and space standards, remodeling the basement or by renegotiating space needs with the State.

City Campus Office Complex – 9 Story (ID: 5605)

2711 West Wells Street

- Background Data
 - Square Feet: 129,989
 - Year Built: 1986
- Overall Building Condition
 - Overall building conditions are fair
- Functionality/ Utilization
 - The former hospital layout does not function well for office use
- Operational Issues
 - Very high cost to operate the building
- Major Capital Requirements
 - Extensive infrastructure upgrades are going to be required
- Safety
 - Sixth floor, which is used for storage, is not safe
 - Major deficiencies in fire protection system
 - Building lacks selected fire rated doors, dampers and penetration seals
- Highest & Best Use
 - Alternative redevelopment of the site tailored to the City of Milwaukee - Near West plan
- Summary
 - Demolish and sell





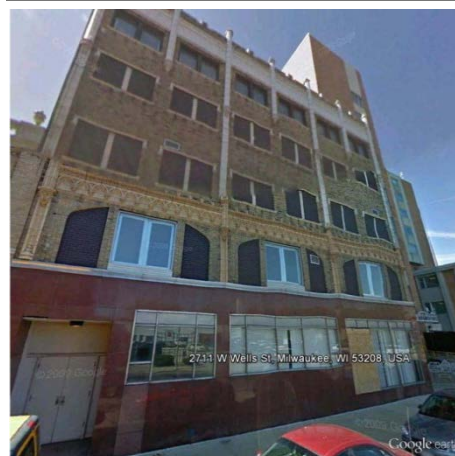
Building Inspections

City Campus Office Complex – 5 Story (ID: 5605)

2711 West Wells Street

- Background Data
 - Square Feet: 28,025
 - Year Built: 1986
- Overall Building Condition
 - Overall building conditions are fair
- Functionality/ Utilization
 - The former hospital layout does not function well for office use
- Operational Issues
 - Very high cost to operate the building
- Major Capital Requirements
 - Extensive infrastructure upgrades required
- Safety
 - Asbestos in the building
 - Major deficiencies in fire protection system
 - Building lacks selected fire rated doors, dampers and penetration seals
- Highest & Best Use
 - Alternative redevelopment of the site should be tailored to the City of Milwaukee - Near West plan
- Summary
 - Demolish and sell

City Campus Office Complex – 5 Story



City Campus 27th Street Store Front (ID: N/A)

North 27th Street at West Wells Street

- Background Data
 - Square Feet: 19,366
 - Year Built: Not available
- Overall Building Condition
 - Operational with several existing leased storefronts
- Functionality/ Utilization
 - Serves the need of neighborhood retail
- Operational Issues
 - County should not be in the retail landlord business

City Campus 27th Street Store Front





Building Inspections

- Major Capital Requirements
 - Significant deferred maintenance
- Safety
 - Major deficiencies in fire protection system
 - Building lacks selected fire rated doors, dampers and penetration seals
- Highest & Best Use
 - Neighborhood retail
- Summary
 - The City of Milwaukee is interested in commercial anchors such as retail, services, entertainment and restaurant anchors along arterial streets in the Near West planning district
 - Discussions should be held with the city or interested 3rd parties about the sale or transfer of the property

City Campus Theater (ID: N/A)

North 27th Street at West Wells Street

- Background Data
 - Square Feet: 9,116
 - Year Built: Not available
- Overall Building Condition
 - Closed theater with good fundamental structure, however, extensive repairs required for re-use
 - Would need extensive improvements
- Functionality/ Utilization
 - Could be operated again as a theater
- Operational Issues
 - Not currently in operation
- Major Capital Requirements
 - Major renovation required
- Safety
 - Peeling paint in toilet rooms should be tested for lead
 - Poor air quality due to condition of building
 - Major deficiencies in fire protection system
 - Building lacks selected fire rated doors, dampers and penetration seals

City Campus Theater





Building Inspections

- Highest & Best Use
 - An operating theater
- Summary
 - The City of Milwaukee is interested in commercial anchors such as retail, services, entertainment and restaurant anchors along arterial streets in the Near West planning district
 - Discussions should be held with the city or interested 3rd parties about the sale or transfer of the property



Market Analysis

MARKET ANALYSIS OVERVIEW

The Market Analysis reviews strategies impacted by the local market.



Market Analysis

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Market Analysis

MARKET ANALYSIS OVERVIEW

Market Approach

A key recommendation of this Consulting Report is to downsize the portfolio and sell underutilized assets. This section makes recommendations concerning the criteria and process for selling underutilized assets.

Current State

The national economic crisis and the current state of the real estate generally are providing unique opportunities to reduce costs for significant occupiers of facilities such as the County of Milwaukee.

Market Analysis Summary		
Current Status	Observations/ Recommendation	Benefits
<ul style="list-style-type: none"> Selected assets with underutilized floors, high energy costs and deferred maintenance are viewed as long term hold properties 	<ul style="list-style-type: none"> Attractive locations and highest and best use make many of these assets marketable for other uses A disposition strategy should be put in place to identify assets for disposition 	<ul style="list-style-type: none"> Raise money for redeployment into other projects Eliminate capital requirements in outmoded buildings Reduce operating expenses
<ul style="list-style-type: none"> Acquired real estate is not routinely evaluated at acquisition to determine the long-term plan and exit strategy for the property 	<ul style="list-style-type: none"> MC has a tendency to acquire and invest in buildings without assessing the need and cost of the property MC should evaluate each asset prior to acquisition and on a routine basis throughout ownership to determine the continued need for the asset and the exit strategy when it is no longer needed 	<ul style="list-style-type: none"> Eliminates purchasing assets that become difficult to exit later Minimizes the expenditure of major capital into an asset that is a short-term hold

Primary Initiatives

Portfolio Downsizing

- Monetize or sell surplus assets
 - Determine mission criticality of the space to current operations
 - Develop criteria to identify underperforming assets including cost of operations, capital expense needs and future use of the property
 - Eliminate as many addresses as possible to reduce infrastructure, maintenance and capital costs
 - Timing: Medium term
 - Cost: Medium – Decommissioning, move and disposition



Market Analysis

Portfolio Acquisitions

- Develop criteria to confirm use and exit strategy for all acquisitions
 - Determine in advance the future need for the space and the viability of disposition if budgets and plans change
 - Avoid moving into facilities that are not suitable just because they are available
 - Timing: Near term
 - Cost: Low

Benefits

Market driven strategies can help to increase current funds through asset monetization. Acquisition strategies can identify problems before acquisitions are made.

DISPOSITION STRATEGIES

Disposition Process Development

Portfolio Downsizing

- Monetize or sell surplus assets
 - Determine mission criticality of the space to current operations

Milwaukee County has significant real estate holdings consisting of nearly 1,000 structures which comprise 13.8 million square feet. This section outlines how and when the County should consider disposing of assets and the means by which those properties are evaluated and sold or leased. Selected buildings are “legacy” buildings, critical to County operations, and will never be sold. Land that has been reserved for conservation and environmental reasons may also remain under the stewardship of the County, but selected parcels may be no longer Mission Critical and become available for disposition.

Disposition Process Model

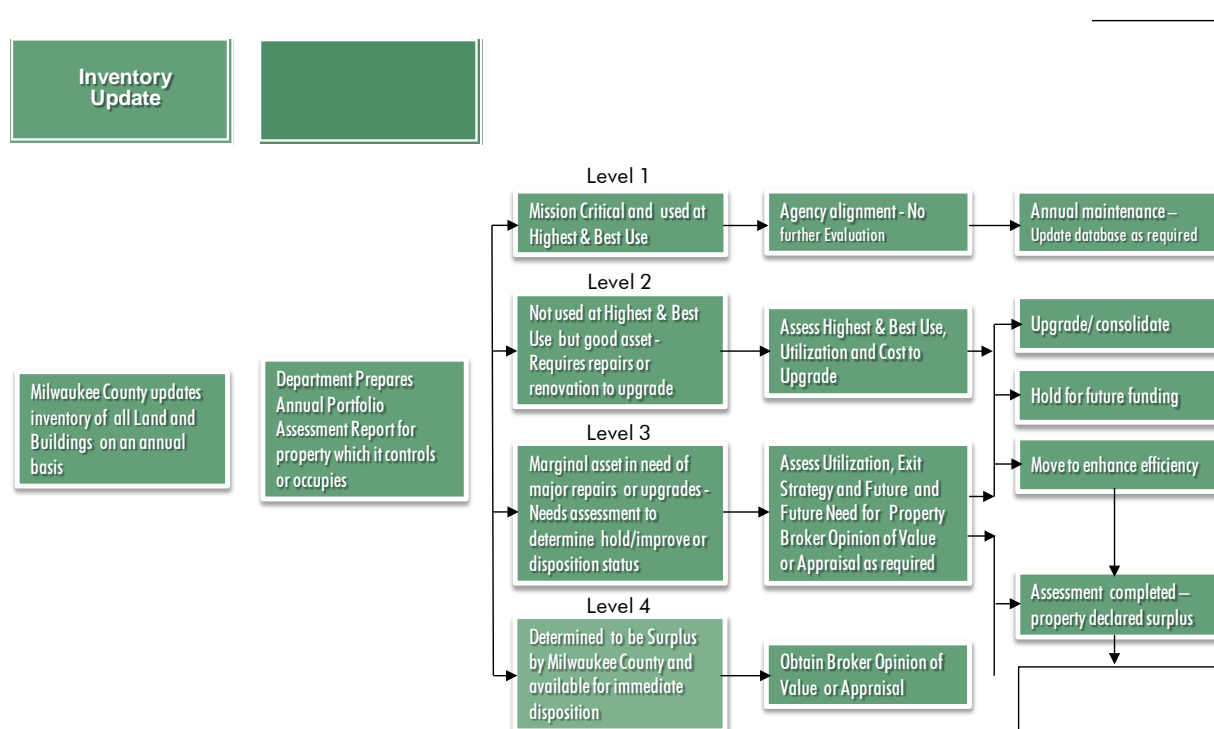
The following model can be used to establish whether a property is a candidate for disposition or should continue to be held by the County. Through a series of diagnostics, the County can determine if a property is used to its Highest and Best Use and if not, whether additional capital should be deployed to improve the asset or whether the real estate should be disposed of by lease, sale or other means.

The following diagram outlines a basic process that Milwaukee County can use to evaluate the potential for disposition of an asset in the County’s portfolio. Every asset in the County portfolio should be evaluated for its mission criticality. Is it a key asset for the delivery of County services?



Market Analysis

Disposition Process Model



Phase 1 – Inventory Update

The first step in evaluating the potential disposition of a property is to ensure that all relevant data is up-to-date. A proper diagnosis requires that relevant operating expenses, utilization and capital improvement budgets reflect current conditions.

Phase 2 – Annual Agency Property Review

CBRE recommends that a list of surplus property is maintained and updated on an annual basis. With training and adherence to the criteria outlined below, the facilities group can help departments catalog and evaluate property on an annual basis. The Portfolio Assessment Report should include all critical information for each property such as location, size of parcel, square footage of any buildings/structures, current function and suitability for intended purpose.

Phase 3 – Prepare Agency Utilization Assessment

In addition, CBRE recommends that a newly centralized real estate group rank each property for probability of continued use in conjunction with the appropriate department.

While many properties will be retained, the use of this ranking system on a year-over-year basis will help the County identify properties that should be sold due to factors like changes in the level of use, capital funding and program adjustments.



Market Analysis

Phase 4 – Align Department Objectives

Following the utilization assessment and confirmation of agency objectives, determine whether the asset can support the County or department's mission going forward. Often additional capital is required to improve the asset to an acceptable condition. If capital is unavailable, the property might be considered for disposition.

The analysis will be used to ascertain:

- Building is in good condition and suitable for its intended purpose. No capital investment required.
- Building attributes i.e. location, size, etc. are suitable for intended purpose. Some renovation is required to bring building to an acceptable modern standard. What is level of capital investment is required?
- Building condition and other factors render the existing facility unacceptable for intended use. In consideration of renovation cost and other factors, disposition of existing facility and acquisition alternative should be considered. Other acquisition methods might include consolidation into existing facilities, lease, purchase, or build-to-suit as a capital project to replace existing facilities.

Phase 5 – Implementation

In the foregoing chart, a number of steps are identified as part of the analysis and implementation of a disposition strategy. The following paragraphs outline the steps and process in more detail.

Primary Use Criteria for the Evaluation of Continued Building Occupancy

The following four levels of assessment should be used to help determine the continued use of a property.

- Level 1: Mission Critical and Highest and Best Use
 - Property is in good condition, is Mission Critical to the occupying agency(s), and is performing at its highest and best use.
 - Recommendation: No action required at this time.
- Level 2: Not Highest and Best Use
 - Property is in good location but may be in substandard condition or, a portion of the property or building could be re-purposed.
 - Recommendation: Confirm that the department wishes to continue to use the property or identify another department to occupy building or land. Estimate cost to renovate property to an acceptable condition.
- Level 3: Limited Utility
 - An entire property or significant portion thereof no longer serves the operational needs of the user department.
 - Recommendation: Estimate cost to renovate property to an acceptable condition. Evaluate highest and best use. Complete a Broker Opinion of Value for property.



Market Analysis

■ Level 4: No Current or Future Use

- An entire property or portion thereof is of no further use to the County and is immediately available for disposition.
- Recommendation: Take steps toward property disposition.

PROPERTY ASSESSMENT METRICS

The following questions are included to assist departments in evaluating property for its Mission Criticality and continued use. In general, the questions pertain to the effective use of property and the impact of change with respect to agency mission, real estate economics, and operational performance.

■ Department Mission

- Are you using the property at its Highest and Best Use with regard to your mission statement?
 - Is it compatible with local development plans or programs?
 - Is it aligned with both current department needs and the portfolio assessment?
- Is all of the property essential to your mission?

■ Real Estate Economics

- Are you using the property at its Highest and Best Use with regard to the real estate economics of the property?
 - Have you considered changes in the surrounding neighborhood, zoning, and environmental factors?
 - Could you justify County use if you had to pay rent at commercial rates?
- Are buffer zones around your property as small as possible? If you were to release part of the property, will local zoning still give you enough protection for buffer zones?
- Are you retaining property as a result of arbitrary property demarcation?
- Are you retaining properties because they require costly demolition, environmental remediation or other improvements?
- Are you retaining a property because of special impediments?
 - Are you keeping property that is considered undesirable because of topography or encumbrances to rights-of-way?
 - Are you retaining land merely because it is landlocked?

■ Operational Performance

- Are operating and maintenance costs excessive compared with those of similar facilities?
- Is the agency not considering a move due to unfunded relocation costs? Could the department save money by relocating to an area better suited to the department's mission?



Market Analysis

- Is there land or space in County-owned buildings that others within or outside the County can use temporarily?
 - If an interest in the County-owned property is sold, will reserving the County's rights and interests in the property allow you to continue operations?
 - How have developments on adjoining land not owned by the government, public access roads, or rights-of-way granted across government-owned land affected your property?
 - Have adjacent developments made any part of it unsuitable or unnecessary for your continued operations or program requirements?
 - Is the property adequate for approved future programs and contemplated program changes?
- The County needs to help departments review facilities that fall into the following categories:
- Not highest and best use
 - Seldom used
 - No current or future use

In addition to the revenue generating potential of surplus properties, it is important to note the cost avoidance associated with selling surplus assets that can be realized by no longer carrying the following costs:

- Insurance
- Maintenance (operational and deferred)
- Utilities
- Liability (e.g. slip and falls)

MARKET ANALYSIS - OFFICE

Milwaukee CBD Office

A steady second quarter has the Milwaukee office market primed for a strong 2012. Availability decreased 10 basis points (bps) during the quarter to 21.1 percent and vacancy decreased 50 bps to 16.4 percent.

The slight decreases in vacancy and availability have been in concert with an increase in the asking rate for the first time since 1Q11. The average Class A asking lease rate is \$20.56 gross per square foot (psf) and represents a \$0.09 gross psf increase over 1Q12. The average asking rent for Class A space in the Downtown East submarket fell in line with the broader market as a \$0.10 gross psf increase brought the rate to \$22.95 gross psf. The rate increases reflect a tempered optimism on the part of owners and a scarcity of meaningfully large, quality spaces in the market.

Suburban office leasing picked up significantly during the second quarter after activity had been primarily focused on the Downtown East submarket during most of 2011. Leading the way for the market was a 60,363 square-foot renewal by Master Lock in Oak Creek. Attractive asking rates in prime spaces

Quick Stats

	Change from last		
	Current	Yr	Qtr
Vacancy	16.4%		
Availability	21.1%		
Lease Rate	\$20.56		
Completions	-		

*The arrows are trend indicators over the specified time period and do not represent a positive or negative value. (e.g., absorption could be negative, but still represent a positive trend over a specified period.)



Market Analysis

that stood vacant have also been attractive to tenants. The result has been instances such as Connecture Inc. relocating to Brookfield from Pewaukee after signing a 33,000 square-foot lease at the Brookfield Lakes Corporate Center.

The Downtown East submarket continues to keep itself in the headlines with a proposed office tower. The most recent proposal is for an 18 story, 350,000 square-foot building to be known as 833 East Michigan. The project marks the fourth attempt since 2010 to raise an office tower in the market and would be the first addition since the completion of 875 East Wisconsin and Cathedral Place for a combined 441,500 square feet in 2003. The project is still in the planning stages, however, Godfrey & Kahn has been mentioned as a possible anchor for the building, potentially taking the top four floors for 100,000 square feet. The Wisconsin Athletic Club has also been named as a possible tenant, and would open a 24,000 square-foot fitness club. The building is similar in size as previously proposed projects, however, the project would be sited on a prime parcel with lakefront views. Milwaukee County has also requested proposals for an adjacent site currently serving as a bus depot.

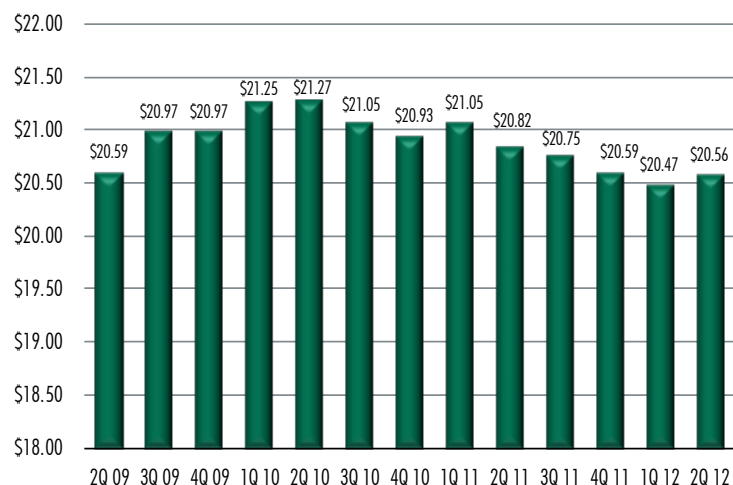
User sale activity has typically been a less aggressive sector in the market, however a failing 38 year old building has generated some activity. Northwestern Mutual Life has purchased the 153,720 square-foot 733 N Van Buren as a staging area for employees while the insurance giant contemplates whether to expand the existing 282,000 square-foot campus in Franklin or rebuild on the site of the current 370,754 square-foot building, which will be razed.

Decreased vacancy and availability in conjunction with the slight increase in asking rates and overall activity are positive developments for the Milwaukee market. Trends are likely to hold in current ranges over the near term with sustained improvements likely in the long run.



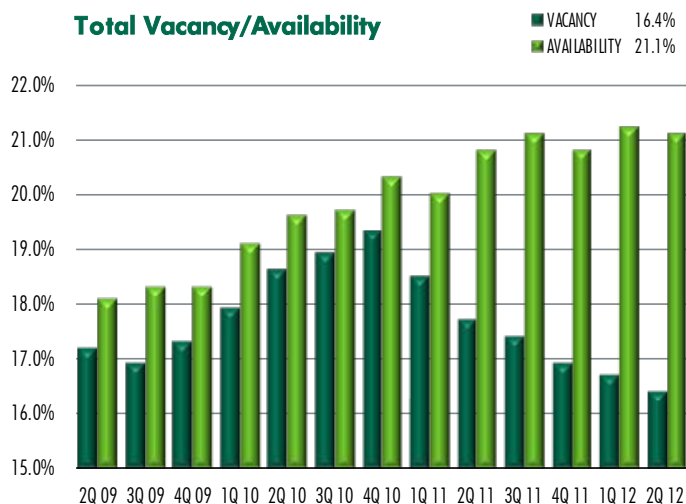
Market Analysis

Average Class A Gross Asking Lease Rate



The overall Class A gross asking lease rate increased \$0.09 gross per square foot in the Milwaukee market, the result of a slightly improved local economy and a dwindling supply of Class A space in the market. The trend should continue to draw support from a combination of multiple mid to large tenants looking for blocks of space and a limited amount of product available in highly desirable locations. Recent discussion of another Class A office building in the Downtown East submarket is a strong indication of just how little space is available in the area.

Total Vacancy/Availability



Total vacancy and availability in the Milwaukee office market dipped slightly during Q212 and should hold steady within current ranges. Availability has established a firm ceiling between 20.7 and 21.2 percent, holding in this range since 2Q11. Vacancy continued to decrease for the sixth consecutive quarter, moving from 16.7 percent to 16.4 percent owing to a strong local economy. Milwaukee has been one of the fastest recovering cities after the downturn and the strength of the office market has been a primary beneficiary.



Market Analysis



Market Opportunities to Reduce Costs
Medium Term - Priority 1

Monetize Surplus Real Estate/Highest and Best Use

Determine highest and best use of underutilized owned real estate (e.g. vacant land, excess office space and unneeded property) and implement a disposition strategy.

Current Status

- Strategic disposition opportunities could help mitigate Milwaukee County's projected budget shortfalls and reduce future expense to maintain vacant assets.
- Surplus property disposition opportunities are currently evaluated and managed by individual departments on an ad-hoc basis.
- Departments need assistance in identifying those non-core assets might have more value for the county if sold.

Risks/Costs

- Public reaction/opposition to any disposition strategy
- Process to facilitate property sales is often cumbersome
- Political sensitivity to sale of certain assets
- Future needs for a property that has little current value for the county can be accommodated by a disposition that retains a residual interest in the asset such as a ground lease.

Assumptions

- An investigation of disposition opportunities and recommendation concerning same is needed.
- A major element of this initiative will be to train departmental staff to identify opportunities in their portfolios in collaboration with the real estate group.

Monetize Surplus Real Estate/ Highest and Best Use (continued on following slide)



Market Opportunities to Reduce Costs
Medium Term - Priority 1

Monetize Surplus Real Estate/Highest and Best Use

Determine highest and best use of underutilized owned real estate (e.g. vacant land, excess office space and unneeded property) and implement a disposition strategy.

PROPOSED SOLUTION

- Determine if any county owned land or buildings can be identified for disposition.
- Determine if co-location can exploit underutilized assets.
- Formalize the disposition process in the form of a playbook, including the identification and preparation of assets for sale.
- Train department personnel in the attributes of likely disposition candidates.
- Train department personnel in the disposition process.

BENEFITS

- Improve cash flow.
- Eliminate operating expenses on underutilized assets.
- Improve efficiency model for underutilized assets.
- Increased property sales resulting in higher revenues to the county.
- Lower operating costs from smaller footprint.

Type	Description	Pros	Cons
Sale	<ul style="list-style-type: none"> ▀ Provides immediate capital infusion ▀ Gets property on tax roles 	<ul style="list-style-type: none"> ✦ Cash ✦ Taxes 	<ul style="list-style-type: none"> ✗ Property out of public control
Lease	<ul style="list-style-type: none"> ▀ Provides long term income stream ▀ Public entity retains ownership ▀ Improvements may revert to public entity ▀ Natural arbitrage exists to get greater capital from asset 	<ul style="list-style-type: none"> ✦ Retain ownership ✦ Long term control 	<ul style="list-style-type: none"> ✗ More complicated ✗ Assume landlord position
Public Private Partnership	<ul style="list-style-type: none"> ▀ Allows public to benefit from economic development on site ▀ May allow for public structures that otherwise could not be funded ▀ Real estate taxes, Tax Increment Financing, etc. all possible 	<ul style="list-style-type: none"> ✦ Generates "halo" \$\$ ✦ Uses private sector capital and expertise 	<ul style="list-style-type: none"> ✗ Complicated to develop vision and design solution ✗ Can be difficult to structure



Energy and Sustainability

ENERGY AND SUSTAINABILITY OVERVIEW

Energy and Sustainability outlines opportunities for reducing energy expenses and increasing green initiatives.



Energy and Sustainability

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Energy and Sustainability

ENERGY AND SUSTAINABILITY OVERVIEW

Energy and Sustainability Assessment Approach

The County has various policies and practices that are designed to promote sustainable building practices and be energy efficient. For example, the County has an active recycling program and it undertakes building systems

Current State

- The County has multiple agencies that track expenses each with a different approach. Significant issues that prevent alignment of cost benchmarking and analysis are:
 - **Allocation/Tracking:** Inconsistent approach to expense tracking and/or cost allocation:
 - **Conformance Lacking:** Multiple accountants each with varying methods of conforming with: “**COUNTY OF MILWAUKEE, 2010 CHART OF ACCOUNTS, Department of Administrative Services, 1/12/2010.**”
 - **Technology:** Some tools and resources are available, but not fully utilized to achieve a baseline level of expense reporting. The CMMS system, , is currently used for dispatching purposes.
- Existing expense categories
 - **Utilities:** Expense reporting was inconsistent; however aggregated data for utility services was available.
 - **Potential Target Savings:** Accounting categories are set up to track expenses, however, costs are not currently allocated to track expenses down to building level detail

Do Green Buildings Make Dollars & Sense?”

(2009) surveyed 154 buildings under CBRE management totaling 51.6 million square feet and 3,000 tenants in 10 U.S. markets. Some of the findings for green buildings were: 2.88 fewer sick for days per year for tenants, translating to more than \$5 per square foot

- Separately metered tenants had 21% lower utility costs
- A single point improvement in ENERGY STAR equates to .83-1.0 improvement in energy usage (e.g.,

Energy and Sustainability Summary

Current Status	Observations/ Recommendation	Benefits
<ul style="list-style-type: none"> Inconsistent approach to expense tracking and allocation 	<ul style="list-style-type: none"> Tools are available, but not fully utilized to track expenses Cross train all finance accounting and real estate personnel 	<ul style="list-style-type: none"> Consistent tracking of operating expenses Able to identify and isolate problems at the source Aids in identifying non-performing assets
<ul style="list-style-type: none"> No consistent use of IT programs across all departments 	<ul style="list-style-type: none"> Different software programs track similar items One consistent platform of programs should be used across all departments 	<ul style="list-style-type: none"> Better coordination of staff and materials Improved cost tracking, budgeting and accounting



Energy and Sustainability

Primary Initiatives

Operating Expense Management

- Cross train all finance managers, accountants and real estate personnel
 - Consistently benchmark these operating costs across all departments/agencies to identify those facilities that are expensive to operate and maintain
 - Timing: Short term – Current accounting classifications are set-up
 - Cost: Low – Staff training sessions
- Collect, track and benchmark facilities data including operating expenses by property
 - Benchmark costs across all departments to identify facilities that are expensive to operate and maintain
 - Compare data to private sector equivalents
 - Timing: Short term – Current accounting classifications are already set-up
 - Cost: Medium – Staff resources to identify and track items

Secondary Initiatives

- Improve/enhance waste and recycling programs
 - Benchmark current recycling programs and develop process for annual review
 - Timing: Short term
 - Cost: Low – Staff resources to identify and track items
- Improve Energy Management through Energy Project investments
 - After the core portfolio is identified, develop a program for energy project investments as properties and systems are repaired and remodeled
 - Timing: Short term
 - Cost: High
- Reduce carbon footprint.
 - In addition to imposing energy and sustainability enhancements in potential leased and owned locations across the portfolio; implementing workplace solutions strategies (working from home, modified work week, incentives to use public transportation) all contribute to reducing carbon footprint.
 - Timing: Medium term
 - Cost: Medium to High



Energy and Sustainability

Benefits

Energy and sustainability initiatives are designed to save money over the term of the occupancy, while achieving the organizational goals of reducing carbon emissions. Savings in direct costs such as water, utilities and employee time off are directly quantifiable benefits.

Consolidating budget authority for all real estate expenditures to the DAS will:

- Eliminate redundant administrative positions at the agency/departmental level.
- Allow for the accurate measurement of facilities costs and increase control of all occupancy expenses across the portfolio.
- Allow for the aggregation and purchase of goods and services in support of real estate operations.



Energy & Sustainability Initiatives
Medium Term - Priority 1

Enhance Waste and Recycling Programs

Perform a waste stream audit to discover ways to decrease waste, reduce costs, support sustainability and increase green recycling.

PROPOSED SOLUTION

- Document existing waste and recycling programs (by building and by agency) in both owned and leased space.
- Update these programs annually.
- Audit current process and establish a training and communications program for occupiers of space

BENEFITS

- Align with overall sustainability initiatives and Executive Directives.
- Increase recycling revenue opportunities.
- Reduce expenses.
- Possible independent awards for compliance.

Current Status

- Milwaukee County supports a waste reduction and a recycling policy that is well articulated. The current program can be benchmarked for annual improvement.

Risks/Costs

- Time and effort is needed to collect data, report and update.
- Recycling revenue fluctuates and should not be the end goal.
- Need to align the county's waste strategy with the overall sustainability program (a combined waste, recycling and sustainability program has more of an impact on overall carbon footprint reduction).

Assumptions

- Milwaukee County is interested in developing a green occupancy model that should be followed uniformly by all county agencies and buildings whether in leased or owned space.



Resource Conservation

Waste Audit & Planning

Planning Guide

Section-by-section road map toward compliance



- "You can only improve what you can measure"
- Requirement for all properties to conduct & document a waste audit in 2010
- Standardizes the methodology & forms for all real estate managers
- Can be performed by a contractor or in-house



Energy and Sustainability



Energy & Sustainability Initiatives
Medium Term - Priority 1

Improve Energy Cost Reduction, Management & Project Investment

Maintain a quarterly Energy Audit to ensure energy costs are kept to a minimum and energy saving strategies are compatible with cost implications. Maintain an annual Energy Management Plan*. Investment in energy projects improves public image, carbon offsetting and allows for expense reduction.

Current Status

- The County has been upgrading buildings to improve energy efficiency and conservation
- There is no formal program to document and benchmark energy savings on a year-over-year basis
- The County needs to install systems and procedures to be able to capture operating expense data on a building-by-building basis
- Improvements may include:
 - Smart metering
 - Advanced lighting systems
 - Building operations and energy management system installation
 - Smart controls
 - Free cooling
 - Solar installation
 - Variable frequency drives
 - Enhanced use of a CMMS system
 - Links into the accounting system to track expenses from the field

Energy Management Plan should include:

- Demand Side
- Supply Side
- Communication/Publicity
- Asset Renewal
- Information Management
- Funding
- Implementation elements

Improve Energy Cost Reduction Analysis (continued on following slide)



Energy & Sustainability Initiatives
Medium Term - Priority 1

Improved Energy Cost Reduction, Management & Project Investment

Maintain a quarterly Energy Audit to ensure energy costs are kept to a minimum and energy saving strategies are compatible with cost implications. Maintain an annual Energy Management Plan*. Investment in energy projects improves public image, carbon offsetting and allows for expense reduction.

PROPOSED SOLUTION

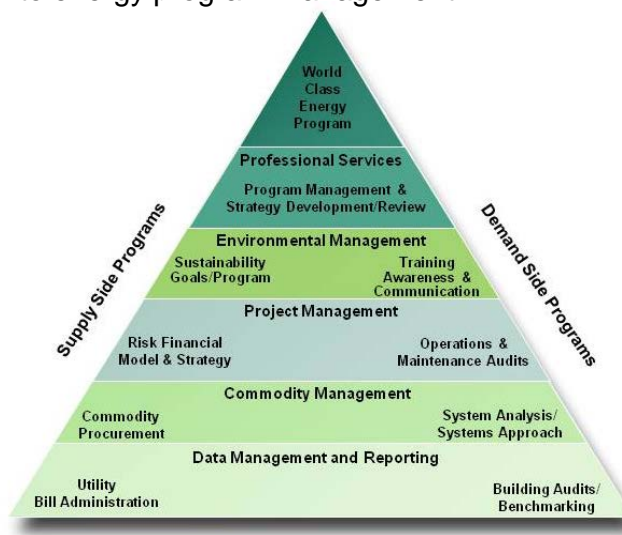
- Continue to reduce energy costs and improve energy management over time.
- Utilize annual energy audits and the Real Estate Team to determine if other federal funds are available to support initiatives already in place or to help further drive down utility expense on an annual basis.
- Follow through on submittals to the facilities group to see if funding is available.
- Implement all appropriate energy management and energy cost reduction strategies in all owned buildings.

BENEFITS

- Proactive management to reduce energy costs today and tomorrow.
- Reduces carbon footprint.
- Supports existing Board directives.
- Supports overall sustainability and green initiatives.
- Improves public perception.
- Possible county awards for significant reduction or new ideas.
- Promotes creativity and partnership in thought and ideas with other states and the federal government.
- Reduce operating expenses and occupancy costs.

The Opportunity:

Ensure a systematic game plan” and approach to energy program management





Energy and Sustainability

GREEN INITIATIVES

Sustainability Action Items

The following list of Green Initiatives Action Items can be implemented across the portfolio. Many are low cost or no cost activities that only require policy changes.

- Recycling
- Transportation
- Behavioral
- Space Initiatives
- Purchasing

Green Initiatives - Recycling		Cost Reducing	Cost Neutral	Cost Additive
Paper Recycling				
1	Reuse shipping boxes in the mailroom and use shredded waste paper as packing material.			
2	Use envelopes a second time with a new address label.			
3	Provide individual paper recycle bins or cardboard boxes at each desk.			
4	Provide recycle bins at each copier/printer/fax (more bins than trash cans increases use).			
Comprehensive Recycling				
5	Establish a common space for reusable office products.			
6	Encourage staff who cannot recycle certain items at home to bring these to the office for recycling			
7	Establish a location in the office to recycle used batteries and miscellaneous products.			
8	Set up a cell phone recycling drive .			
9	Request the building management to implement a recycling program; if not available, identify potential vendors.			
10	Ask building management to advance existing programs to include additional materials (batteries, plastic, glass etc.).			
11	Recycle old or unused furniture whenever possible.			
12	Post signs in production rooms and kitchens as a reminder to reduce, reuse and recycle.			
13	Switch to refillable pens and pencils made from recycled materials.			

Green Initiatives - Transportation		Cost Reducing	Cost Neutral	Cost Additive
Travel				
1	Hold long-distance meetings via NetMeeting, LiveMeeting and conference calls rather than traveling.			
2	Use a county travel invoice tracking system whenever possible to eliminate the need for printed invoices and checks.			
3	Business car rentals: Request an environmentally acceptable vehicle that accommodates your size party			
Commuting				
4	Encourage staff to use public transportation, where available.			
5	Ask the OOB to provide a place for bike storage to encourage employees to ride their bikes to work.			
6	Provide incentives for employees who carpool or use public transportation (i.e. free parking or company paid transit passes).			



Energy and Sustainability

Green Initiatives - Behavioral		Cost Reducing	Cost Neutral	Cost Additive
Copy and Print Management				
1	Encourage electronic marketing vs. large print distributions (use on-line solutions if possible).			
2	Avoid using a cover page when possible, saving paper on both ends.			
3	Eliminate paper invitations and other print memos by using email.			
4	Set copier default to copy double-sided.			
5	Set copier and printer drivers to print double-sided or "2 sheets per page". Encourage employees to use these functions.			
6	Turn off devices besides fax machines that aren't in use before leaving the office.			
7	Utilize remanufactured/recycled toner cartridges for the printers and fax machines, wherever available.			
8	Save paper with clean sides to be used as scrap/scratch/drafts before recycling.			
9	Encourage printing on used paper if one side remains clean.			
10	Use old Human Resources reports to print other information that is for the HR file only.			
11	Use easy document scanning/emailing process instead of faxing.			
12	Use document scanning and email to prevent use of printing and shipping documents.			
13	Encourage use of desktop published e-flyers rather than printed notices.			
14	Post monthly phone lists and calendars online instead of as attachments to be printed.			
15	Encourage employees to read email and files without printing them out.			
16	Send PowerPoint presentations as a PPS that cannot be printed.			
17	Create notebooks for employees using the scratch paper			
18	Avoid printing in color or on color when possible; colored paper uses dyes or pigments which have an environmental impact.			
19	Scan letterhead to produce an e-copy that can be used as a template for documents appearing on letterhead.			
Computers				
20	Adjust computers to energy-saving settings.			
21	Make sure employees shut down computers when leaving for the day ("standby" draws power when not in use).			
22	Use power strips with an ON/OFF switch so that all devices power down at once.			
23	Today's monitors no longer require energy wasting screen savers! Instead, turn your monitor off when you leave your desk.			
Postal and Shipping				
24	Scan and email documents before considering printing and shipping them.			
25	Consolidate all loose parcels into bulk if shipping via interoffice.			
26	Take the time to redirect undelivered mail with "No longer at this address."			
27	Contact advertisers directly to quit receiving unsolicited marketing materials and catalog products.			
28	Notify staff who receive unwanted mail to be removed from mailing lists by contacting: Mail Reference Service, Direct Marketing Association, P.O. Box 3861, New York, NY 10163-3861.			
29	Circulate one document and make common reading material available to all (reduces postage as well).			
On-Site Office Suite Management				
30	Keep the blinds in your office closed during peak sun hours (all seasons) and especially on weekends.			
31	Suite dishwashers: Wash only full loads of dishes and consider air-drying dishes instead of using the drying cycle.			
32	Encourage employees to turn off lights when departing a conference room or unused space.			
33	Switch to day cleaning so lights can be turned off in the evening rather than 2:00 a.m.			
34	Set up an electronic filing rather than paper filing system.			
35	Make your "Green Initiative" a cornerstone of your new hire office orientation.			
36	Establish a "Green Team" to implement plans for making the office more environmentally friendly.			
37	Share best practices from other offices and lines of business.			
38	Ask employees to bring their lunch to work in reusable containers (if ordering, suggest doing so as a group).			
39	Offer quarterly, semiannual or annual awards for employee innovation in improving the office's green efforts.			



Energy and Sustainability

Green Initiatives - Space Initiatives		Cost Reducing	Cost Neutral	Cost Additive
HVAC				
1	Adopt on-demand HVAC.			
2	Ask building maintenance to inspect thermostats semi-annually to ensure they are working properly.			
3	Set thermostats to energy-efficient heating/cooling levels during weekends and evenings.			
4	Avoid placing lamps near the thermostats in your space. The heat causes the HVAC system to work harder than necessary.			
Lighting				
5	Install interior lighting sensors that lower lights during peak sunlight hours.			
6	Install motion detectors in offices and conference rooms to ensure lights are only in use when rooms are occupied.			
7	Install low-voltage light fixtures.			
8	Install timers, sensors and program lighting to turn off at set times/or based on use.			
On-Site Office Suite Management				
9	Tint office windows for higher efficiency and reduced office heat absorption.			
10	Ensure remodels include environmentally friendly or recycled carpet.			
11	Look for buildings with LEED certification when relocating.			
12	Consider the balance between benefits of natural sunlight and temperature regulation needs.			
13	Ensure that space is metered separately so that you can track your energy reduction efforts.			
14	Use indoor plants to promote clean air and natural cooling.			
15	When repainting an area, require contractor to use low VOC paint or paint that meets Green Seal 11 standards.			

Green Initiatives - Purchasing		Cost Reducing	Cost Neutral	Cost Additive
Supply Purchases				
1	Discontinue the purchase of bottled water.			
2	Purchase in bulk or consolidate orders over time to eliminate extra packaging/shipping.			
3	Use on-demand printing rather than push printing that requires bulk ordering of marketing materials (e.g., brochures).			
4	Procure office supplies through established preferred vendor online ordering to streamline process and reduce paper waste.			
5	Purchase ceramic/glass dishware to reduce wasted paper, plastics and Styrofoam cups.			
6	Ensure replacement office machines have scanning capabilities to reduce faxing, printing and shipping of documents.			
7	Purchase copy machines with faxing capabilities to reduce energy, capital and toner costs			
7	Purchase recycled copier/printer paper and recyclable toner cartridges.			
8	Purchase energy efficient bulbs for your office space.			
9	Replace bathroom paper products with recycled or post-consumer content.			
10	Choose unbleached paper for products not intended for writing or printing of text (file folders, envelopes, etc.).			
11	Purchase organic or Fair Trade-labeled coffees and teas.			
12	Use only post-consumer content paper (paper towels, napkins, paper plates, cups).			
13	Purchase recycled file folders.			
14	Purchase recycled/ post-consumer content binders.			
15	Purchase refurbished or environmentally friendly new furniture.			
16	Purchase environmentally friendly or recycled binding materials, tabs and covers.			
Vendor Management				
17	Use, or ask the cleaning service to use, microfiber towels for cleaning rather than wasteful paper towels.			
18	If you host a meeting or conference involving food and beverages, source them from a vendor that uses sustainable			
19	Use, or ask the building cleaning company to use, environmental friendly cleaning products.			



Energy and Sustainability

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Strategy Development

STRATEGY DEVELOPMENT

Strategy Development reviews opportunities for selected individual properties.



Strategy Development

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Strategy Development

ALTERNATIVE STRATEGIES DEVELOPMENT

Strategy Development Approach

The CBRE Team has walked-through 25 buildings that account for over 50% of the non-special use space (over 3.6M SF; excludes museum, jails, parks, airport and zoo). This assessment included a review of building conditions, utilization, functionality, location and basic MEP systems (mechanical, electrical and plumbing).

Strategy Development Results

Highest and Best Use

In looking at Highest and Best Use of selected facilities within this study, the CBRE Team has identified properties that are not being used to their Highest and Best Use and are not Mission Critical to the delivery of County services. Milwaukee County could realize an infusion of capital and add to the current tax base through property sales of assets that are underutilized, have high capital expense requirements and no longer serve the core mission of delivering County services. Owned facilities that remain in the portfolio could be improved to their Highest and Best Use and serve as sites for consolidation and collocation. In this section we will give a brief overview of the development process as an alternative, along with a review of options to dispose of County owned assets to raise cash and return properties to the tax rolls.

Development Process

Generally speaking, the development process unfolds with a series of events that must happen in order for next critical steps to even begin. Within a "normal" development process there are certain elements that must be met. At a minimum this process requires the following general steps: idea generation, refinement of that idea, back-of-the-envelope testing of that development idea, negotiations of purchase offers and other contracts, dealing with municipal regulations, building the project, and managing the overall project after completion. Redeveloping existing properties, such with this study, requires very similar practices and processes.

Public sector developments are very similar to private development projects in that the same process exists. The public sector's role as regulator is very prevalent with all real estate development regardless of class --- public or private. Some constraints exist with private developers while dealing with regulations that may unfamiliar to them. With regard to entities such as Milwaukee County, these regulations, although still in place, are much more easily navigated due to the relationships across the approval process. It's vitally important that all interested parties understand the process of development when deciding whether to develop (or redevelop) properties within this study. Milwaukee County would act as the developer or seller of certain properties under the recommendations of this study due to highest and best use analysis of the study team.

Disposition of County Owned Properties

Some county owned properties have a higher real estate value if sold to a buyer that would then create new tax base for Milwaukee County. Under this study some properties have been identified that fit into this scenario. Some of the assets that have been identified have inefficiencies that could be better served as either a consolidation of county departments to other county owned facilities that may have vacancies or should be sold. Under the latter, the assets themselves are no longer seen as viable and practical for their current use because of either design



Strategy Development

inadequacies or due to capital requirements that may severely outweigh the benefit of serving these departments. In either state, these buildings are no longer a benefit to the county and would be best served by selling them.

One important possibility to consider when selling some of these assets would be a sale leaseback scenario. This type of real estate opportunity allows for building owners (Milwaukee County) to essentially sell their current assets and use the built up equity to reinvest into the core of their given business and then enter into a long term lease with the buyer of the asset. Also, depending on the structure of the new lease with the buyer, management of facilities would also be a service that could now be the responsibility of the purchaser. Releasing the once illiquid capital can reshape the financial condition of entities that are looking for ways to cut costs and redistribute capital in a more efficient way.

Proposed Scenarios

The primary driver of greater efficiency and cost saving involves a higher utilization of the primary space identified for continued occupancy by the County. CBRE believes the County should focus on the core campus properties in downtown Milwaukee.

- The CBRE Team believes that the core campus can be greatly increased in capacity.
- Maximizing space will improve staffing efficiencies for real estate management and core county functions such as the courts.
- Much of the funding for strategy implementation can be derived from cost savings in operations and property sales.

Core County Campus

The Core County Campus strategy has several primary recommendations:

- Identify core assets to retain, serve as consolidation locations, upgrade systems and maximize the utilization of the facilities.
- Revise space standards and alternative work strategies based on the recommendations contained in this report to maximize use of the space.
- Utilize revised space standards to update the planning studies completed in 2002 for the Courthouse and in 1992/2008 for the Safety Building, to determine the best strategy and optimal capacity for these buildings. Space in the Criminal Justice Facility should be included in this assessment.
- Identify assets to be demolished and replaced or sold based on the findings of the core campus reuse study.





Strategy Development

Over the course of the Milwaukee County Facilities Study, CBRE has identified properties that are candidates for development or redevelopment and properties that could be sold.

- Potential for redevelopment: Courthouse (#10) and Safety Building (#30)
- Demolish and redevelop: Community Correctional Center (#35) and Medical Examiner Office (#37)
- Demolish, sell land or redevelop: Mental Health Center (#5040), Day Hospital (#5070), Food Service Building (#5060), Child and Adolescent Treatment Center (#5080) and Kelly Nutrition /Senior Center (#3125 and #3130)
- Sell Assets: Technology Innovation Center (Asset ID #5290) and City Campus (#5605),
- Sale contingent on reuse planning for core campus: Marcia Coggs (#5600) and Juvenile Justice Center (#5000)

Asset-by-Asset Strategy

The following section summarizes the future strategy for primary properties reviewed for this study.

Medical Examiner and Community Correctional Center - 1004 N. 10th Street

- Total Building Size: 149,374 square feet; Low rise and six story sections
- Total Site Area: 1.64 acres (71,438 square feet)
- Built: Community Correctional Center (CCC) -1931/ Medical Examiner-1974
- Costs are not appropriately allocated to these facilities for the majority of general facility categories, however the utility costs are approximately 35% higher (nearly \$1.60/sf).
- Recommendation: Redevelop this site to serve future county occupancy needs. Both buildings are outdated and inefficient. Currently the CCC building is vacant and has no current value as-is. The Medical Examiner portion of the building is outdated and seemingly inadequate in terms of its use. The buildings should be razed and redeveloped into a higher and better real estate use.

Close and demolish the Medical Examiner's office and former Huber Community Correctional Center (former St. Anthony Hospital). Huber has been moved to Franklin, but that is not ideal. To capitalize on synergies, the Medical Examiner's functions may be combined with similar city and state labs and may be moved near the Regional Medical Center, especially the Medical College of Wisconsin. The remaining vacant parcel may be used for parking, court consolidation or related County functions or it could be sold. We recommend holding until details of Core Campus plan are finalized.

Courthouse – 901 North 9th Street

- Total Building Size: 1,021,000 square feet
- Total Site Area: N/A
- Built: 1932
- Stories:
- Recommendation: Update previous plan for reuse of the existing building or site as this is a core asset. Utilize revised space planning standards to maximize the building footprint. Ramp up the electronic filing initiative to increase space for office occupancy. Backfill from City Campus and other locations.



Strategy Development

Safety Building - 821 West State Street

- Total Building Size: 296,000 square feet
- Total Site Area: N/A
- Built: 1928
- Stories: 7
- Recommendation: Update the 1992 Safety Building Reuse Study to assess the feasibility of a full remodeling of the existing building or site. Utilize revised space planning standards to maximize the existing occupied areas and evaluate the feasibility of re-using the former jail space. Evaluate the proposed link addition highlighted in the 1992 Reuse Study to determine the feasibility of a full courts consolidation.

Marcia Coggs Human Services Center - 1220 West Vliet Street

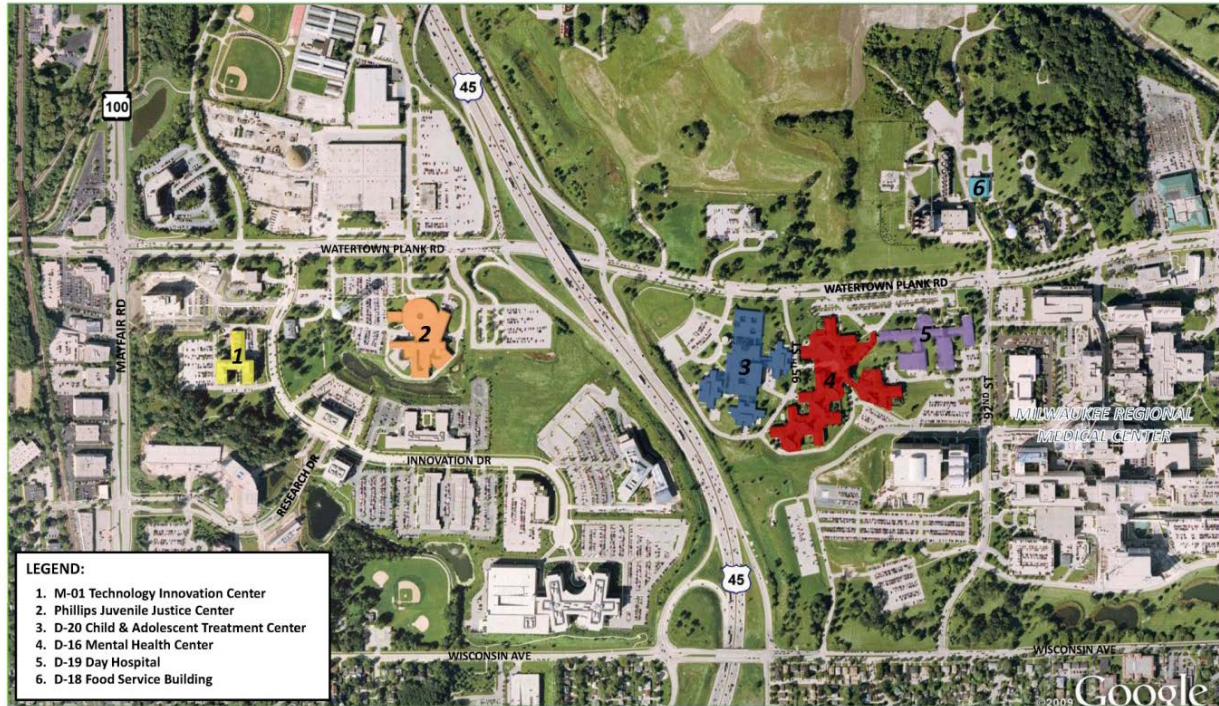
- Total Building Size: 222,482 square feet
- Total Site Area: N/A
- Built: 1920
- Stories: 3
- Recommendation: Update the Courthouse area planning for the Courthouse and Safety building to determine the overall capacity and need for office space. Utilize revised space planning standards to maximize the building footprint in the Courthouse plan. Based on that assessment use Marcia Coggs as follows:
 - If sufficient space can be found in the immediate Courthouse complex, approach the State to explore their interest in a possible purchase or negotiate a longer term lease with the State and then sell to a third party buyer.
 - Marcia Coggs sale value is dependent in part on the State of Wisconsin. A longer term lease signed by the State and/or County could increase its value in a sale to a third party buyer.
 - If additional space is needed to house staff from City Campus and other consolidation locations, increase capacity at the Marcia Coggs building using up-to-date workplace concepts and space standards, remodeling the basement or by renegotiating space needs with the State.



Strategy Development

Watertown Plank Road Area

Milwaukee County Watertown Plank Road Area Properties



Technology Innovation Center - 10437 Innovation Drive

- Total Building Size: 137,247 square feet
- Total Site Area: 6.27 acres (273,124 square feet)
- Built: 1915
- Stories: 5
- Utility costs also exceed \$2.20/sf which is high and inefficient. For comparative use facilities, costs should be closer to \$1.45-\$1.60/sf
- Recommendation: The County is currently subsidizing a new business incubator. Neither the building nor the county offer strategic advantages for these businesses. Other public and private groups in the market are offering similar business incubator space/services and could provide space for the current tenants. The current master lease with the County and existing rent flows do not appear to cover operating and capital needs. The building's deferred maintenance requires significant capital commitments in the next few years.

Based on huge capital improvement needs in the coming years (including a building steam line cut-off due to highway realignment) and the subsidy to the operation, it is recommended that the county sell this to a developer who can redevelop the site into a more effective use that would complement the other uses nearby.



Strategy Development

Vel Phillips Juvenile Justice Center - 9455 Watertown Plank Road

- Total Building Size: 219,538 square feet
- Total Site Area: N/A
- Built: 1962; additions 1994
- Stories: 3
- Recommendation: Update the Courthouse area planning for the Courthouse and Safety building to determine the overall capacity and need for office space. Utilize revised space planning standards to maximize the building footprint in the Courthouse plan. Based on that assessment use the Juvenile Justice Center as follows:
 - If sufficient space can be found in the immediate Courthouse Complex (CC), move into remodeled space at the CC and sell to a 3rd party buyer.
 - If insufficient funds are available to execute a move strategy, repair deferred maintenance items.

Mental Health - 9455 Watertown Plank Road

- Total Building Size: 425,400 square feet
- Total Site Area: 18.9 acres (approximately 823,280 square feet)
- Built: 1978
- Stories: 2
- Utility costs exceed \$4.25/ft, extremely high and inefficient. For comparative use facilities, costs should be closer to \$3.00/sf.
- Recommendation: The sprawling County Mental Health facility is joined by the county Day Hospital and the Child & Adolescent Treatment Center. Together, the departments sit on roughly 46 acres adjacent to numerous medical facilities. The Mental Health Center, although functional is not fully compliant with current regulations and standards.

The New Behavioral Health Facility Study Committee Report (2011) previously recommended the completion of a 120-bed mental facility that could possibly be the beginning of a higher and best use scenario for a site.

“As this report points out in the information provided, pinpointing the exact size of a new hospital at this time is difficult, but the committee firmly believes that the current 280 bed facility is too large and is creating a model of care that is financially unsustainable. In order to better serve the needs of the clients, the committee recommends a significant downsizing of the county run facility and shifting emphasis to a less costly model of care in the community.”

Redevelopment options could include the development of a smaller facility on less land than the current building occupies. The remainder could be retained for future expansion for either the county or other compatible use. The County should sell the excess land to a compatible user.



Strategy Development

Child and Adolescent Treatment Center (CATC)

- Total Building Size: 182,787 square feet
- Total Site Area: 17.8 acres (approximately 775,300 square feet)
- Built: 1978
- Stories: 2
- Utility costs are above average.
- Recommendation: The sprawling Child & Adolescent Treatment Center is joined by the County Day Hospital and the County Mental Health facility. Together, the departments sit on roughly 46 acres adjacent to numerous medical facilities.

This facility should be evaluated in context of the overall County plan for Mental Health facilities including the adjacent Mental Health Center. We recommend exploring alternatives for current users (Wauwatosa Schools, UW Extension) of the facility and eventual sale of the complex.

Redevelopment options could include the development of a smaller Mental Health facility on less land than the current building occupies. The remainder could be retained for future expansion for either the county or other compatible use or sold to other 3rd parties.

Day Hospital - 9201 Watertown Plank Road

- Total Building Size: 129,433 square feet
- Total Site Area: 9.6 acres (approximately 418,200 square feet)
- Built: 1968
- Stories: 2
- Recommendation: The recommendation would be to phase this building in as part of a larger redevelopment of the overall Mental Health campus (46 acres). Many areas including the gym, bowling alley and pool are underutilized as program requirements of 3rd party contractors using the space have changed. A portion of the 46 acres could be used for a phased development that includes a new Mental Health facility.

Food Service Building - 9150 Watertown Plank Road

- Total Building Size: 35,028 square feet
- Total Site Area: 3.27 acres (142,441 square feet)
- Built: 1957
- Stories: 2
- Recommendation: Consolidate the service into an overall larger redevelopment of the Mental Health site across the street. Sell the current food service building and property to possibly UWM.



Strategy Development

City Campus - 2711 West Wells Street

- Total Building Size: 158,014 square feet – 9 story and 5 story structures
- Total Site Area: .58 acres (25,200 SF) approximate building coverage
- Built: 5 story – 1950s – early 1960s; 9 story – 1964 and 1973
- There are two county owned lots immediately west of the site across 28th Street (2805 W. Wells St. and 763 N. 28th St.) that are 1.69 acres and 0.74 acres respectively. They are used for parking.
- Operating costs are high, exceeding \$7.75/sf, approximately 60% higher than comparable BOMA/IFMA data
- Recommendation: Sell to buyer that would redevelop the site for a higher and best use based on input from the City of Milwaukee's Near West Plan. Currently, the space is extremely underutilized and undesirably outdated.
 - The current tenants that occupy the building could possibly be moved to the Marcia Coggs building at 1220 West Vliet Street or other consolidation locations.

Milwaukee County City Campus



City Campus - 2711 West Wells Street – Theater and Retail

- Total Building Size: Storefront retail: Approximately 11,200 SF; Theater: Approximately 10,000 SF
- Total Site Area: refer to approximate building areas
- Built: Early 1900's
- Recommendation: Sell to buyer that would redevelop the theater and continue to rent out the retail spaces.

Kelly Nutrition and Senior Center - 5400 South Lake Drive

- Total Building Size: 14,590 square feet
- Total Site Area: 3.90 acres (170,070 square feet)
- Built: Senior Center-1954; Nutrition Building-1974
- There is insufficient information to compare total operating costs because there is a hybrid solution of shared responsibilities between County Facilities Group and the tenant, a non-governmental agency. As a smaller facility, this facility could easily be combined with other options.
- Recommendation: Based on the current building conditions and functionality it is recommended that this facility be razed to provide a better operating facility.
- Discussions with the Parks Department – the owner of the site – are required to identify alternative solutions for the property such as a consolidation of both the nutrition (food building) and the senior activity center with a possible a senior housing project.



Strategy Development

SUMMARY ASSET SALE ASSUMPTIONS

The CBRE Team completed a valuation estimate for selected properties that were analyzed as part of this study. The purpose of the valuation exercise was to determine potential proceeds that may be available for other applications..

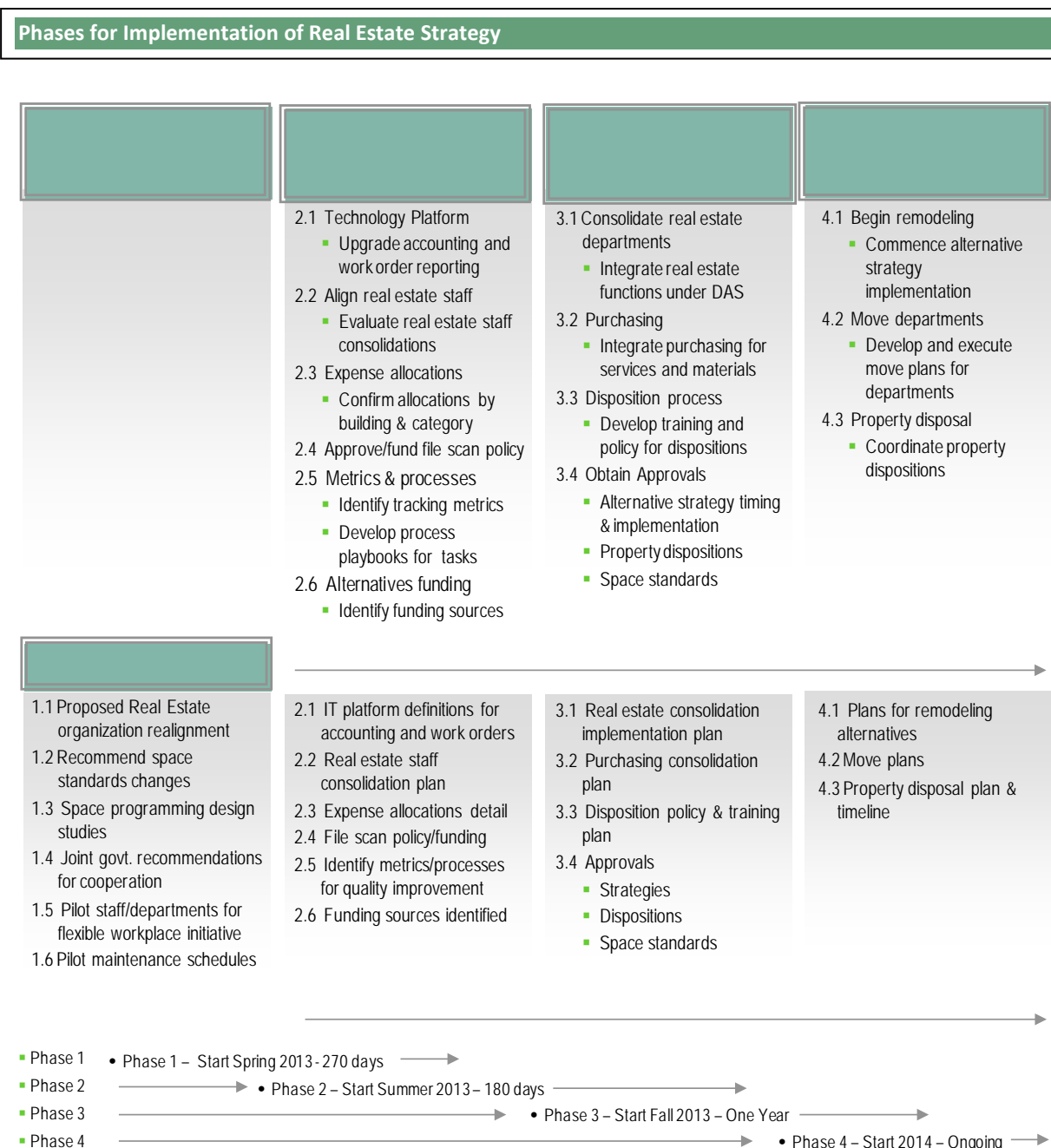
The results of the valuation exercise on a building-by-building basis remains confidential. However, the range of value for 13 identified assets, for purposes of this study, was estimated to be **\$25,000,000 to \$30,000,000**. The values were calculated as a range due to market fluctuations and a variety of options the County may have when disposing or reusing certain assets. For example, values could rise based on a County lease income stream rather than an outright sale. A structure of this type could possibly enhance property values.



Strategy Development

Project Phasing

The following project phasing and timeline provides an overview of the steps required and approximate timing to execute the recommendations in this report.





Appendix A – Building Inspections – Safety List

APPENDIX A

Review of Safety Items



Appendix A – Building Inspections – Safety List

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Appendix A – Building Inspections – Safety List

MILWAUKEE COUNTY 25 BUILDING SAFETY CONCERN LIST

The following list of identified safety concern items includes conditions observed during walking tours of the buildings. While a significant number of building deficiencies were noted, the scope of this study did not include analysis of structural members, an assessment of hidden conditions or a complete code comparison of “as built” features. The average age of each building, applied use of unsuitable buildings and the deferred maintenance found at most locations indicates that the County may need to increase surveillance and tracking of key building components to mitigate problems before they become hazards. While a reduced County Facilities staff has been forced to focus on critical, immediate need issues, some of our observations would suggest there are deficiencies that could or already are exposing the County to life-safety problems, building deterioration and excessive operating costs. The following is a short list of concerns. A more detailed building assessment can be found in the Appendix E Supplement.

Courthouse

- Ramps and stairs to basement level spaces are temporary wooden structures and have no railings (safety concern?)
- Storage areas are cluttered and unorganized – many items piled high and toppling over
- Basement corridors are used for storage
- No sprinkler system in the building including open stair wells
- Paint shop is not separated from mechanical and electrical equipment rooms

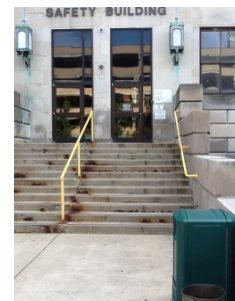


Criminal Justice Facility

- No major safety issues noted

Safety Building

- Corridors used for storage block egress paths
- Walls are opened up when pipes burst causing exposed asbestos which is abated at time of work but remaining condition is unsafe
- Exterior steps are deteriorating and handrails rusting could cause hand slivers, trips, etc.



Community Correctional Center

- Building is vacated and should be demolished
- Deterioration of the building is a major safety issue



Appendix A – Building Inspections – Safety List

Medical Examiner

- Pests contribute to air-borne disease
- Corridors lined with storage impeded exiting
- Exterior steps are deteriorating and can cause trip hazard
- Water damage from a roof leak (now repaired) can create air-borne hazards from mold



McGovern Park Senior Center

- The location has security issues - break-ins
- Exit doors lack panic hardware



Rose Park Senior Center

- Main entry concrete is a trip hazard
- Neighborhood Location – all windows have some type of automated barrier
- Exterior doors should have single action / secure type panic devices rather than push bars with thumb turn locks. Thumb turns are not easily unlocked during a panic situation which can cause delays in egress during emergency situations
- Some exits are locked all day



Washington Park Senior Center

- Curbs and sidewalks overgrown with weeds, cracked concrete causes trip hazards, especially at elderly facility
- Building has no fire sprinklers



Wil-O-Way – West Underwood Creek Parkway

- Overgrown landscaping hinders visible security at the main entrance for visitors and users of the building given its public and park like setting





Appendix A – Building Inspections – Safety List

Wil-O-Way Wading Pool – West Underwood Creek Parkway

- Anti-slip pool bottom
- Need to determine if nit meets Virginia Graham Baker Act

Wil-O-Way Wading Pool – South Lake Drive

- Main water service is next to electrical service equipment
- Need to monitor effectiveness of fire alarm system

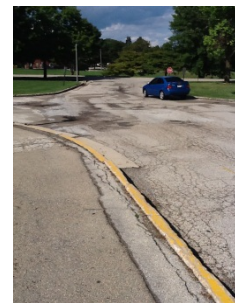
Kelly Nutrition / Senior Center

- Separate buildings hampers safe navigation between buildings during winter months, security all year
- No stoops at exterior doors causes pavement settlement at door thresholds
- Older wood double-hung windows are heavy and difficult for elderly to open. Could drop and cause injury
- The local Fire Inspector requested a second means of egress be provided in large hall per building code requirements



Wilson Park Senior Center

- Accessible curb ramp has been patched and is crumbling – does not meet today's code and design standards
- Exterior doors should have single action / secure type panic devices rather than push bars with thumb turn locks. Thumb turns are not easily unlocked during a panic situation which can cause delays in egress during emergency situations
- Curbs, sidewalks and asphalt are cracked and buckling causing trip hazards, especially at elderly facility
- Facility has no fire sprinklers

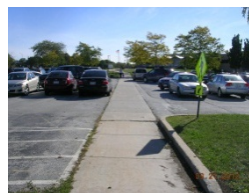




Appendix A – Building Inspections – Safety List

Children's Court Center

- Exterior concrete walks uneven, trip hazards
- Spawling / falling concrete from underside of concrete overhangs
- Parking and pedestrian conflicts in parking lots
- Fire alarm system has a heat and routing problem and should be replaced

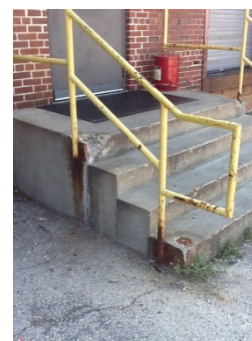


Mental Health Complex

- Code requirements are forcing upgrades to many fixtures
- Current standards for mental health facilities exceed the current conditions found at the Mental Health Center. Future plans for this facility need to consider cost and return on investment of upgrading the current building

Food Service Building

- Dangling chains and unsecured ladders pose safety issue for occupants
- No air conditioning in food service environment lends to poor air quality and unsanitary air which enhances air-borne bacteria
- Floor tile and pipe wrap assumed to be asbestos should be tested and abated
- Exterior steps are deteriorating and handrails rusting could cause hand slivers, trips, etc.
- Kitchen electrical outlets are not GFCI



Day Hospital

- Dangling cables and unorganized work space could be potential safety concern
- Loose and broken floor tile is a trip hazard
- Recommend relocation of electrical box in room 127 as it is near waste and steam lines





Appendix A – Building Inspections – Safety List

Child and Adolescent Treatment Center

- The exterior sidewalk, parking lot, and driveways are in very poor condition. The numerous cracks and unevenness in sidewalks create a potential tripping hazard and are a safety concern.



Technology Innovation Center

- Basement emergency stairs have plant growth and busted concrete –concern with door opening fully and concrete causes trip hazard
- Roof access doors are unlocked – roof is not adequately protected for public use
- Old wood windows are not safe to operate
- Can't find replacement parts for fire alarm system



Marcia Coggs

- Loading dock requires protective guardrails
- Open water service well in basement should have cover
- Neighborhood security is an issue
- Steam pipes located above existing switchgear
- Broken breakers in elevator panel



City Campus 9 story

- The entire 6th floor is unsafe
- Major deficiencies in fire protection system
- Building lacks selected fire rated doors, dampers and penetration seals

City Campus 5 story

- Aging fire alarm system
- Asbestos in building
- Building lacks selected fire rated doors, dampers and penetration seals



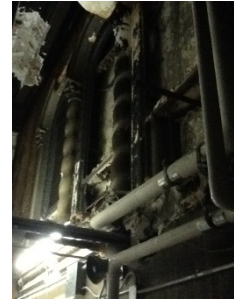
Appendix A – Building Inspections – Safety List

Storefront

- Major deficiencies in fire protection system
- Building lacks selected fire rated doors, dampers and penetration seals

Theater

- Peeling paint in toilet rooms should be tested for lead
- Poor air quality due to condition of building
- Major deficiencies in fire protection system
- Building lacks selected fire rated doors, dampers and penetration seals





Appendix B – Interview Notes

APPENDIX B

Interview Notes



Appendix B – Interview Notes

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Appendix B – Interview Notes

INTERVIEW: Rick Ceschin; Deputy Director, Human Resources

I. AGENCY DESCRIPTION

- Function
 - Human resources functions
 - Supports retirement programs
- Organization
 - A. Most of staff housed at courthouse
 - B. Some field imbedded staff at airport and City Campus
 - C. Staffing
 - 55 FTEs
 - 25 – 30 HR; 10 of them at the courthouse
 - 10 – 12 retirement
 - 10 in benefits at courthouse
 - 3 – 4 consultants

II. GROWTH/ CONTRACTION DRIVERS

- Drivers of Growth/Contraction
 - Downsized staff over time
 - Would like to fill 5 – 8 positions, but budgets are tight

III. TRENDS THAT IMPACT STAFFING & SPACE NEED

- Major staffing changes
 - Budgets are limiting major increases in staff

IV. ORGANIZATION/ LOCATION

- No statutory or policy mandates to be in particular geographic areas
- Have staffed field office locations with HR personnel to serve larger staff populations

V. DEPARTMENT CO-LOCATION

- HR does not need to be near other departments
- Groups that are not co-located with that interact with often
- Primary space is centrally located at the courthouse

VI. DEFINING OPERATIONAL NEEDS

- Facilities Master Plan
 - N/A
- Utilization tracking
 - Currently, 3 empty offices and 3 empty workstations
 - Current utilization



Appendix B – Interview Notes

- Occupancy of space that considered surplus or underutilized
 - Major training space, filing area, furniture storage and break area are in an underutilized mezzanine space
 - No budget for restacking
- First floor location requirements
 - No requirement to be on first floors
- Job functions (i.e., telecommuting, shared work areas for field personnel, satellite offices)
 - Staff not typically out-of-office in frequent basis
- Next 5 years – Impact of changes in voice/data, fiber optics, electronic files, HVAC, and electric distribution on space needs
 - Digitizing of stored files is a goal. – Need to get funded – Great potential for space reduction
- Do you foresee changes in your working environment such as a transition from private offices and workstations to primarily open and shared space?
 - No mention of change in mix of offices and cubes

VII. CAPITAL REQUIREMENTS

- Does your agency have a capital outlay budget? N/A

INTERVIEW: Don Natzke, Director, Office for Persons with Disabilities

I. AGENCY DESCRIPTION

- Function
 - Providing services to people with disabilities
 - Supports programs in several parks
- Organization
 - Most of staff housed at courthouse

II. GROWTH/ CONTRACTION DRIVERS

- Drivers of Growth/Contraction
 - Based on funding
 - 3rd party service agencies

III. TRENDS THAT IMPACT STAFFING & SPACE NEED

- Major staffing changes
 - Budgets impact staffing
 - Tenants in Wil-O-Way buildings pay rent that funds property repairs



Appendix B – Interview Notes

IV. ORGANIZATION/ LOCATION

- No mandates to be in particular geographic areas
- Staff in Courthouse complex

V. DEPARTMENT CO-LOCATION

- DOS does not need to be near other departments
- Programs serving DOS clients are housed in park based facilities
- Lack of ready bus transit is an issue

VII. DEFINING OPERATIONAL NEEDS

- Facilities Master Plan
 - Some data in VFA reports
- Utilization tracking
 - Wil-O-Way Recreation Center South - Grant Park
 - Under renovation thru 2012
 - Renovations have cut income from 3rd party social services providers
 - Need to replace tenants lost during renovation
 - Wil-O-Way Recreation Center - Underwood Parkway
 - Used for disabled persons day camp; Easter Seals evening recreation programs
 - Office space for family care 15 – 20 staff
 - Heavily used and performing well
 - Funding approved for renovations
- Occupancy of space that considered surplus or underutilized
 - Space is not underutilized
 - Revenue from 3rd party social services providers, event rentals and day camps
- First floor location requirements
 - N/A
- Property Maintenance
 - Senior Center maintenance crews repair the buildings
 - Use a private cleaning contractor
 - Security system – False alarm calls a problem
 - Major capital improvement \$ come from county building funds
 - Need to promote ADA facilities
- Needs for Programs
 - Good space
 - Income from programs to fund space
 - Good access for programs



Appendix B – Interview Notes

- Do you foresee changes in your working environment such as a transition from private offices and workstations to primarily open and shared space?
 - No mention of change in mix of offices and cubes

INTERVIEWED: Hector Colon, Director, Department of Health and Human Services
 Paula Lucey, Administrator of the DHHS Behavior Health Division
 Jeanne Dorff, DHHS Associate Administrator - Fiscal
 Lynn Gram, Assistant Hospital Administrator, Behavior Health

(This department includes the Behavioral Health facilities on the County Grounds; Also mental health facility on county grounds)

I. AGENCY DESCRIPTION

- Function
 - Provide mental health services to constituents
 - In-patient and out-patient services
 - Works with private providers to keep levels
 - Desire to close one unit and move to community based service
- Funding
 - Insurance
 - Badger Care
 - Title 19

II. GROWTH/ CONTRACTION DRIVERS

- Drivers of Growth/Contraction
 - Patient load is constant

III. TRENDS THAT IMPACT STAFFING & SPACE NEED

- Major staffing changes
 - Funding and delivery of services models are changing – more community based services and use of contractors or private treatment centers

IV. ORGANIZATION/ LOCATION

- Most of space at County Grounds

V. DEPARTMENT CO-LOCATION

- Preferred location is on County Grounds near the Medical College – Transit is not an issue
- Children's and adolescent treatment could be anywhere
- Residential treatment buildings E & F are leased by St. Charles a 3rd party provider



Appendix B – Interview Notes

VI. DEFINING OPERATIONAL NEEDS

- Mental Health Center (Hospital) – 9455 Watertown Plank Road
 - 3 units “hilltop” for developmentally disabled, aggressive patients
 - 70 licensed beds; 66 staffed
 - Will close 24 beds ; move into community
 - 5 acute units (for children)+ school for kids and 24 beds
 - Adult units built for 24; 21 staffed
 - 3 units “nursing home”
 - 70 licensed beds; 66 staffed
 - Facility needs specially modified fixtures – Funding difficult to obtain
 - Emergency department - 15,000 visits/year
 - Observation beds – 1 to 3 day stays next to emergency department
 - Day treatment – 40 visits/day in treatment rooms – AM and PM programs
- Day Hospital – 9150 Watertown Plank Road
 - Not used as a day hospital
 - Most of facility rented out – private and non-profit – case management for adolescents
 - Rent to St. Charles – cut back from \$35k/mo to \$7k/mo
 - Common space not used as much - bowling, gym, café and recreation space - due to shorter stays (7 days not 21)
 - Common Support Offices – Managed care supports 8,000 people
- New Building Discussion
 - Deficiencies driving new building discussion
 - Redesign to clarify need
 - Need to take acute cases private hospitals are not taking
 - Two patient types
 - Community – anxiety, depression
 - Acute – Aggressive behavior requiring hospital treatment
 - Fewer beds needed in new facility
 - Existing building has high infrastructure repair costs and high energy costs
 - Roof and window repairs would lesson energy costs, but facility also has high level of exterior walls
 - HVAC upgrades have been in budget since 2004
 - Chiller system is expensive to operate
 - Emergency power is drawn from second power plant – there is no back-up generator
- Marcia Coggs – 1220 West Vliet Street
 - Well maintained building – Two-thirds leased to State – generates revenue
 - State wants space for 150 employees



Appendix B – Interview Notes

- Property owner next door wants to sell
- 2013 budget to buy and renovate old building next door
- Food Service – 9150 Watertown Plank Road
 - At the “end of life cycle”
 - Bigger than it needs to be
 - Serves: Buildings D,E & F, Children’s Court, Dept. of aging (1,000 meals) and Mental Health
 - Property owner next door wants to sell
 - 2013 budget to buy and renovate old building next door

VII. CAPITAL REQUIREMENTS

- Funding for new treatment hospital is major capital need
- Funding estimate in 2011 report of \$60 million

Interview: Pat Farley, Director, Department of Administrative Services

Notes from this interview under development

I. AGENCY DESCRIPTION

- Function
 - Facilities
 - Risk Management
 - Budget
 - IMSD – IT
 - Disabilities
 - Economic Development
- Funding
 - Revenue cross charged to other departments

II. GROWTH/ CONTRACTION DRIVERS

- Drivers of Growth/Contraction
 - Staffing trends limited by budgets
 - County looking to management and automation solutions to handle growth with no increases in staff

III. TRENDS THAT IMPACT STAFFING & SPACE NEED

- Budget constraints
- Identify core mission
- Probably a flat tax levy
- Healthcare costs
- Unfunded state mandates
- Records – HIPPA, compliance, audit



Appendix B – Interview Notes

IV. ORGANIZATION/ LOCATION

- DAS manages most major county facilities

V. DEPARTMENT CO-LOCATION

- Departments in various locations

VI. DEFINING OPERATIONAL NEEDS

- Need better space utilization
- Capital expense (CapEx)
 - There is a review panel for CapEx
 - Recommendations prepared
 - County Executive can amend
 - Board passes both CapEx and Operating Expense budget
 - Provide yearly and 5 year budgets

VII. CAPITAL REQUIREMENTS

- \$875 million debt on \$1.3 billion budget
- \$110 million debt payment

ADDITIONAL SURVEYS RECEIVED FROM

- RICHARD SCHMIDT – SHERIFF’S OFFICE
- KERRY MITCHELL – DHHS
- HECTOR COLON - DHHS

Survey-Richard R Schmidt, Senior Commander, Milwaukee County Sheriff’s Office

Identify the “drivers” of growth or contraction within your agency:

Economic conditions, population growth, changes in demographics, political issues, budget, legal, changes in laws and crime trends.

Do you expect significant staffing changes within your agency’s offices (i.e. project funding, market growth/contraction, consolidation, etc.)?



Appendix B – Interview Notes

Quantify: There is a need for court space, inmate confinement for pre and post-conviction, including a new Huber facility, administrative offices including but not limited to criminal investigations, communications services including the dispatch center, court offices, records space for the courts, process service, data analysis, and the potential to move juvenile courts and detention downtown and the “House of Corrections” downtown.

Locations currently downtown are the courthouse, safety building, and criminal justice facility. There is the House of Correction (CCFS) in Franklin, the patrol substation in Wauwatosa and specialty vehicles associated with the EOD unit, boat patrol, command posts, SWAT vehicles etc. spread to several different sites based on space availability.

Are you required statutorily or by policy to be in particular geographic areas? (i.e. specific service areas, zip codes, etc.)

Milwaukee County

Is there likely to be public concern or opposition to location of your facilities in certain neighborhoods?

Yes, inmate housing.

Are public hearings required/advised for you to locate in a particular area?

Yes.

Will regulatory approval be required in order for your agency/location to occupy a new facility? (i.e. clinic for drug rehabilitation)

Yes.

What considerations will apply to the selection of different locations?

Public transportation access (busses, highway), proximity to other county offices, client neighborhoods, cost, special use facilities.

Based on your utilization assessments and changing mandates, does your agency occupy space that you consider surplus or underutilized?

No.

How do you/your people do their jobs?

Telecommuting, shared work areas, satellite offices, other.

Agency-wide over the next 5 years, how will changes in voice/data, fiber optics, electronic files, HVAC, and electric distribution change your need for space?

Unknown based on budgetary constraints allowing upgraded space saving methodologies as mentioned in the question.

Do you foresee changes in your working environment such as a transition from private offices and workstations to primarily open and shared space?

No planned change.



Appendix B – Interview Notes

Does your agency have a capital outlay budget?

See Department of Administrative Services for their plan for the County.

Are other 3rd party funds (Federal, private grants, etc.) received in connection with the services provided by your agency?

Yes.

Can you provide energy costs for each facility or per square foot?

Contact the County Facilities Maintenance Division for related information.

Is your Agency using special energy management (audits, upgrades, etc.) or sustainability (recycling, green cleaning, training, etc.) tools or techniques? Have there been any certifications or awards received for your effort?

Contact the County Facilities Maintenance Division for related information.

Do you have service agreements in place for major equipment and systems (i.e. heating and air conditioning in owned buildings)?

Contact the County Facilities Maintenance Division for related information.

Do you have scheduled maintenance and service policies in place for major building services?

Contact the County Facilities Maintenance Division for related information.

The level of security your agency/location requires is best categorized as:

Low: Standard building security at tenant entrance

Medium: Verification required at entry to department

High: Restricted area – employee only

Maximum: Clearance required for access by all individuals

All levels of security are involved with our buildings

Reasons for security concerns:

Storage of hazardous materials, weapons, narcotics, hours of operation, services to potentially violent citizens, privacy requirements in connection to delivery of services, the agency handles money.

Does your agency/location have special parking needs?

Parking is grossly inadequate for our downtown employees.

Do you require specialized (not typical office) space?

Yes.



Appendix B – Interview Notes

What teaching/training/public meeting spaces does your agency need? Does your agency conduct special meetings for the training of employees or constituents (for example, Employment Services)?

Yes. Employee training, roll call rooms, large conference rooms.

Does conference space need to be dedicated to each department or could it be shared?

Various divisions need their own space.

What are your hours of operation?

24/7/365.

Does your agency deliver services and information directly to individual citizens within specific areas (city, county, etc.)?

Yes, county.

Are there comfort, safety, security or card access issues at this location?

Yes.

If you have the opportunity to make any facility improvements, what would they be?

Modernize/replace safety building office space

What criticisms have you heard more frequently about your facility from employees and/or external constituents?

Roaches in all buildings, antiquated facility (Safety Building); directions to specific locations are cumbersome for the public who are not familiar with the complex; courtrooms that require moving inmates through non-secure areas; lack of secure county employee parking; difficulty in updating power and network connections, lack of wireless ability in the courthouse complex, specifically the jail.

The Sheriff's Office has a wide variety of duties requiring multiple considerations for space and security levels that are spread throughout the County. To properly meet all of the needs of this organization as it serves the public will require considerable time and analysis should a new strategic plan be developed. This basic survey would need to be expanded to a detailed interview of all of our top-level command staff and a full analysis of our current and future real estate needs. Should there be a realistic and feasible ability to move forward with the concepts you presented in this survey, we will provide the necessary subject matter experts to assist you in developing said plan.



Appendix B – Interview Notes

Interviewed: Kerry Mitchell, Department of Human Resources

Describe the nature of your agency's function and organization:

Our mission is to provide quality HR services to attract, develop, motivate and retain a diverse workforce within a supportive, customer service-driven work environment. Key functions include Employment & Staffing, Compensation, Benefits, Training & Development, HR Partner/Generalist, and Employee Relations.

Identify the "drivers" of growth or contraction within your agency:

Economic conditions, population growth, changes in demographics, political issues, budget, legal, changes in strategic direction by the county exec.

Do you expect significant staffing changes within your agency's offices (i.e. project funding, market growth/contraction, consolidation, etc.)?

No.

Do you expect major changes in operations that will impact space needs (i.e. outsourcing, space standards, productivity gains, etc.)?

No.

Are you required statutorily or by policy to be in particular geographic areas? (i.e. specific service areas, zip codes, etc.)

No.

Is there likely to be public concern or opposition to location of your facilities in certain neighborhoods?

No.

Are public hearings required/advised for you to locate in a particular area?

No.

Will regulatory approval be required in order for your agency/location to occupy a new facility? (i.e. clinic for drug rehabilitation)

No.

What initiatives has your agency undertaken to co-locate & share facilities with related services from other agencies?

Our central HR group currently shares space with Labor Relations, PRB/Ethics Board, and Deferred Compensation. We have several HR employees who reside at different facilities/near or inside the departments they support.

Are there groups that are not co-located with you that you interact with often?

No.



Appendix B – Interview Notes

If your agency was consolidated into a single multi-agency location that provides numerous county services, what other agencies would be complimentary tenants?

It's hard to say. We need space that is secured and confidential due to the sensitivity of confidential information, meeting HIPPA requirements, etc.

Will your agency or any division within the agency provide services from a single facility, or will service locations be decentralized throughout the County?

Decentralized strategy. We are largely centralized (about 70%) and 30% of the staff is decentralized due to the nature of their work.

What considerations will apply to the selection of different locations?

Public transportation access (busses, highway), proximity to other county offices, cost, security and confidentiality.

Does your Agency have a Facilities Master Plan?

No.

Does your agency track space utilization using staff counts?

No.

Based upon your utilization assessments and changing mandates, does your agency occupy space that you consider surplus or underutilized?

We have some space on our mezzanine level that is underutilized. We have been in the process of determining the most effective use of that space, but no decisions have been made yet. Otherwise we are fairly well-utilized.

Does your agency/location require first floor locations?

No.

How do you/your people do their jobs (i.e., telecommuting, shared work areas for field personnel, satellite offices)

Employees work in offices and cubicles. Some travel between locations for meetings. A small number work from home evenings and weekends, in addition to work in the office during the work week.

Agency-wide over the next 5 years, how will changes in voice/data, fiber optics, electronic files, HVAC and electric distribution change your need for space?

Moving towards electronic files will virtually eliminate our need for the large filing room in the mezzanine. It will also create some space on our floor due to the reduced need for filing cabinets.

Do you foresee changes in your working environment such as a transition from private offices and workstations to primarily open and shared space?

No.



Appendix B – Interview Notes

Does your agency have a capital outlay budget?

No.

Are other 3rd party funds (Federal, private grants, etc.) received in connection with the services provided by your agency?

No.

Can you provide energy costs for each facility or per square foot?

Contact the County Facilities Maintenance Division for related information.

Is your Agency using special energy management (audits, upgrades, etc.) or sustainability (recycling, green cleaning, training, etc.) tools or techniques? Have there been any certifications or awards received for your effort?

Contact the County Facilities Maintenance Division for related information.

Do you have service agreements in place for major equipment and systems (i.e. heating and air conditioning in owned buildings)?

Contact the County Facilities Maintenance Division for related information.

Do you have scheduled maintenance and service policies in place for major building services?

Contact the County Facilities Maintenance Division for related information.

The level of security your agency/location requires is best categorized as:

Medium: Verification required at entry to department.

Does your agency/location have special parking needs?

No.

Do you require specialized (not typical office) spaces?

No.

What teaching/training/public meeting spaces does your agency need? Does your agency conduct special meetings for the training of employees or constituents (for example, Employment Services)?

Yes. We currently give pre-employment screening tests as well as the training division give various training classes and seminars. Currently we have a computer lab, a testing facility, and a large meeting room.

Does conference space need to be dedicated to each department or could it be shared?

Dedicated.



Appendix B – Interview Notes

What are your hours of operation?

7:30 AM to 5:00 PM.

Does your agency deliver services and information directly to individual citizens within specific areas (city, county, etc.)?

No.

Are there comfort, safety, security or card access issues at this location?

Yes. All employees are given security key cards as the office is a secured office.

If you have the opportunity to make any facility improvements, what would they be?

Replace carpeting, repair and repaint office walls. Replace all office furniture, replace cubicle walls, update HVAC, etc.

What criticisms have you heard most frequently about your facility from employees and/or external constituents?

That it looks old and dingy.

John Sullivan, Child Support Services

Describe the nature of your agency's function and organization:

Child support services, federally mandated program establishing paternity, establishing orders for support, and collecting support. We work closely with the family courts and manage a case load of approximately 126,000.

Identify the "drivers" of growth or contraction within your agency:

Economic growth: Continued economic challenges in the community keep pressure on child support and increases the need for our services.

Changes in demographics: More single parent families, more need for child support.

Legal: 15 lawyers along with additional paralegals on staff, proximity to court is key.

Do you expect significant staffing changes within your agency's offices (i.e. project funding, market growth/contraction, consolidation, etc.)?

No

Do you expect major changes in operations that will impact space needs (i.e. outsourcing, space standards, productivity gains, etc.)?

No



Appendix B – Interview Notes

Are you required statutorily or by policy to be in particular geographic areas? (i.e. specific service areas, zip codes, etc.)

Yes, need access to the courts.

Is there likely to be public concern or opposition to location of your facilities in certain neighborhoods?

Yes, need close proximity for rapid response from sheriff, high traffic flow, lots of people, lots of kids, some family squabbling.

Are public hearings required/advised for you to locate in a particular area?

Yes, court hearings need to be in front of family court all day long.

Will regulatory approval be required in order for your agency/location to occupy a new facility? (i.e. clinic for drug rehabilitation)

I expect the court system will insist that we are in the courthouse.

What initiatives has your agency undertaken to co-locate & share facilities with related services from other agencies?

We have recently moved our overlapping space with clerk of courts. We currently share some space, and some personnel in family court space on floor 7.

Are there groups that are not co-located with you that you interact with often?

Off-site personnel at YMCA and others

If your agency was consolidated into a single multi-agency location that provides numerous county services, what other agencies would be complimentary tenants?

We are in such a multi-agency location, the Milwaukee County Courthouse, and need to remain located here.

Will your agency or any division within the agency provide services from a single facility, or will service locations be decentralized throughout the County?

Consolidated strategy.

What considerations will apply to the selection of different locations?

Public transportation access, proximity to other county offices (courts)

Does your Agency have a Facilities Master Plan?

No

Does your agency track space utilization using staff counts?

No



Appendix B – Interview Notes

Does your agency/location require first floor locations?

Yes. High volume/traffic agency directly servicing public.

How do you/your people do their jobs (i.e., telecommuting, shared work areas for field personnel, satellite offices)

Lots of cubicles, spaces for meeting with participants, public.

Agency-wide over the next 5 years, how will changes in voice/data, fiber optics, electronic files, HVAC and electric distribution change your need for space?

We have already switched over to on-base file system. I do not expect further impact on our need for space, which is driven more by public interaction than technology.

Do you foresee changes in your working environment such as a transition from private offices and workstations to primarily open and shared space?

No, already done.

Does your agency have a capital outlay budget?

No.

Are other 3rd party funds (Federal, private grants, etc.) received in connection with the services provided by your agency?

Yes, we manage a \$1.8 million federal 3 year grant on fatherhood. We need space to meet with participants and do this in our offices.

Can you provide energy costs for each facility or per square foot?

No.

Is your Agency using special energy management (audits, upgrades, etc.) or sustainability (recycling, green cleaning, training, etc.) tools or techniques? Have there been any certifications or awards received for your effort?

No, we do recycle.

The level of security your agency/location requires is best categorized as:

High: Restricted area – employee only.

Reasons for security concerns:

Services to potentially violent citizens, privacy requirements in connection to delivery of services, the agency handles money.



Appendix B – Interview Notes

Does your agency/location have special parking needs?

No.

Do you require specialized (not typical office) spaces?

Secure windows to deal w/ public and semi-private interview space and semi-private generic testing facility.

What teaching/training/public meeting spaces does your agency need? Does your agency conduct special meetings for the training of employees or constituents (for example, Employment Services)?

Staff of 126, need conference space on training space on ongoing basis.

Does conference space need to be dedicated to each department or could it be shared?

Shared.

What are your hours of operation?

8-5 Monday-Friday.

Does your agency deliver services and information directly to individual citizens within specific areas (city, county, etc.)?

Yes, county.

Are there comfort, safety, security or card access issues at this location?

Security is a regular issue. Public can be unruly. Child support deals with issues of money, sex, and broken relationships.

If you have the opportunity to make any facility improvements, what would they be?

Need for conference/training space. Mezzanine space is dark and has poor air circulation.

What criticisms have you heard most frequently about your facility from employees and/or external constituents?

Mezzanine is generally unpleasant, dark and dated.

**Milwaukee Comprehensive Facilities Plan
Monday, October 15, 2012**

Interviewed: Greg High, Department of Engineering & Architecture

Narrative:

The County Board may confuse our Comprehensive Facilities Plan with the, yet to be started, work of the newly formed Facilities Assessment Team. This team will be formed in the 2013 Budget cycle from a recommendation following the accident at O'Donnell Park. Work will be done by a group of County employees: 1- architect, 2- HVAC



Appendix B – Interview Notes

maintenance techs, and 1- electrical/mechanical tech. These are newly created County positions. This is similar to what the County Department of Transportation uses for analysis of highways, roads, bridges and trails. The recommendations from the Assessment Team will (or should) have an impact on the 5-year Capital planning process.

The new organizational structure of Dept. of Administrative Services (DOA) includes Architectural & Engineering Services Group and Facilities Maintenance Group (Gary Waszak's Group) which fall under the Facilities Management umbrella run by newly hired Jim Burton. Other departments that are part of the Dept. of Administrative Services (DOA) are Finance, Procurement, Sustainability, and Disability Services, in addition to Facilities Management.

Greg emphasized that his department's role is to serve as an architectural and engineering consultant to County Departments and they only get involved in projects after being asked to. It appears there may be gaps and overlaps in job responsibilities and between Architectural & Engineering and Facilities Maintenance Groups.

The Vanderweil Database has the capability for centralized property management, lease administration, purchasing, in addition to a property management budgeting and project management tool. The Highway Department and Parks have similar, but separate asset management software tools. The use of Vanderweil has a fairly long history with the County (15-years +/-) and was started on the mid 90's with Mike Zylka at the County Grounds.

Vanderweil executes surveys and builds a database using their own systems and architects, they use local DBE mechanical and electrical consultants to provide onsite detail.

When the Vanderweil Database was initially purchased, updates were funded and annual reports were generated until funding was cut from later budgets. Since that time, there has been minimal progress in updating the database or surveying additional buildings. To date about 60% of county buildings have been survey and are in the database and no updates have been provided for the properties in the system for about 10-years.

The Zoo and Transit Group have been using the database more than any other County groups since its inception although Transit has stopped using the system as of late, while the Zoo still is using it.

Vanderweil survey prioritizes building issues and necessary work in 5 levels (Level 1 = high priority, Level 5 = low priority). Greg acknowledged that there seems to be a communication gap between County Tenants and Facilities Management with respect to the data and priorities in Vanderweil database.

Although Vanderweil reports are still used for the Capital budgeting process and Architectural & Engineering review all facility funding requests, Greg feels funds allocated for properties may be diverted by tenants/users for programming. This may be as a result of tenants/users of County property being in charge of maintaining their own facilities. He feels there may be a disconnect between the budgeting process and the eventual use of funds. Therefore buildings are handled in different ways (he cited Department of Aging) and Engineering/ Facilities Management are constantly "putting out fires".

In addition to the Vanderweil database, The Engineering & Architectural Group also has used, or is still using Primavera, MS Project, and Primavera Cost & Schedule for project scheduling and accounting.

Greg initially stated he didn't want to comment on the County Water System but he did say the following:

- County has tried to sell the system to Wauwatosa over the years and still are, with little success.
- The County Facilities Maintenance Group maintains the system.



Appendix B – Interview Notes

- County pays for fire protection at the County Grounds (Technology Park/Regional Medical Center) including operation of the Fire Station on the grounds.
- Milwaukee Regional Medical Center Tenants share use/cost of domestic water portion of the system, about 5-6% of use.
- There is a pending issue with water system changes that will be necessary with the reconstruction of the I-45/Watertown Plank Road interchange. The County cannot be reimbursed by the WI-DOT for work, while the City of Wauwatosa can.

Greg believes the County Board should be supportive of our plan and recommendations. Although it was our impression that he seems to think we will be making specific recommendations on building, maintenance, and operational initiatives, rather than a more general overview. NJR/TMP – 10/17/12

Milwaukee County Comprehensive Facilities Plan User Interviews, Wednesday, October 2, 2012 Facilities Operations

Interviewed: Gary Waszak, Facilities Manager, Department of Administrative Services

Narrative:

Facilities Operations – Large Facilities

In general the major issue in dealing with the older buildings owned by the County is limited resources and funding to take care of them. Significant retirements, without replacements, of mechanics and mid-level managers have left a significant void in the knowledge base and ability to get work done.

Additionally, most department heads (users) seem to be only concerned with their “myopic” view of the space within their responsibility and have little or no sensitivity of boarder facilities issues that impact almost all buildings owned by the County.

Facilities Operations is concerned with daily issues raised by users almost every day and has little time with a smaller staff to deal with PM, back of house issues rather than putting out “fires”. Dedicated staff is no longer available and the department is almost always short of the needed manpower. Therefore most decisions are based on short term need, not an overall Facilities strategy. (Current repairs of City Campus boilers was cited as an example).

When Facilities moved from DPW to the Department of Administration, various operational issues that are driven by budget have begun to be addressed such as the tenant leases on the Grounds. Also, discussions of building maintenance and building inspections and how they need to be woven into the budget have provided deeper insights for budgeting and staffing.

The E-Maintenance and Vanderweil (VFA) systems currently work independently. VFA is not tied to any work order system and is generally not used by operations staff. The E-Maintenance system is on the county-wide Intranet with “request only” access granted to designated individuals in user departments. Mechanics do not currently have hand-held devices and for the most part work off paper work orders. There is a separate work order tool in VFA and it is used for some PM work on major systems. The Facilities group is looking to use new technologies that may be able to tie these systems together. CBRE | Comprehensive Facilities Planning Consulting Report to Milwaukee County

Housekeeping is provided by contractors with 1-year contract/2-year extensions. The current contractor has several buildings in the county system but their work is not considered high enough quality and Facilities will be



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going out to bid in 2013. Individual areas in the County are not on the same contract, for example Parks and Airport are using separate contractors or their own labor force.

Milwaukee County- Facilities Operations is operating a Water Utility for the County grounds. The utility was most likely created in the early 19th Century to supply water to the Grounds since those services were not available that far west in the County at that time. The County secures water from the City of Milwaukee Water Utility at 60th & North Avenue and has piping running west to the County Grounds. Along the way certain Wauwatosa residents and businesses are on the County system rather than Wauwatosa, supplying the same services in the same area. "All" operating expenses are loaded into water billings, although County facilities now only use approximately 6% of the water. Some 5+/- FTE's support the operation of the water system. TMP 10/05/12

Milwaukee Comprehensive Facilities Plan User Interviews, Tuesday September 25, 2012 County Medical Examiner's Office

Interviewed:

**Dr. Brian Peterson MD, Chief Medical Examiner
Karen Domagalski, Operations Manager**

Narrative:

County Medical Examiners facilities

In general there is not enough space in the facilities being used by the Medical Examiner, which is part of the former St. Anthony Hospital. The building is not ADA compliant, now causing problems with an employee, restricting her ability to do her job, and for visitors requiring disability accommodations. There is no elevator in the building although two floors are occupied and busy. There are window problems (leaking), and significant HVAC shortcomings, which leads to the use of space heaters and fans by employees. Upon occasion there are noteworthy problems with odors in the lab and processing areas.

The facility to process bodies is not large enough, nor properly equipped to handle large scale disasters. Additionally there are no bio-safety controls in the building recommended by the CDC. Upon occasion the facilities, including walk-in coolers, freezer space and tissue storage, are overtaxed by normal processing of bodies for forensic examination and research. Because of the age of the building it has significant shortcomings, such as enough outlets in the exam suite, poor circulation patterns, no fiber optic service (with no ability to adapt for service) and enough temperature controlled space. Waste (blood and other liquids) is presently dumped in sewer drains, because there are not holding tanks sufficient to process this waste. In general the building is not compliant with Federal Statutes and State guidelines for Medical Examiners facilities. There is pending legislation in Madison that may force nursing homes and hospitals to send unclaimed bodies to the Medical Examiner which will further tax Milwaukee County facilities if passed.

The location is good for access to the adjacent Milwaukee County Courthouse, but poor for security, and proximity to a large homeless population. There is only marginal perimeter security control, very limited evidence control within the building and with certain homicide evidence, no control. The ideal location suggested by Dr. Peterson is on the County Grounds in a new facility (not adaptive use of an older building). Ideally it should be co-located with the Milwaukee County Crime Lab with sufficient parking and access to Froedert Hospital, Children's Hospital and the Medical College of Wisconsin.

Records storage is a significant issue, since there have been flooding problems in the past several years, not enough space and little if any humidity and temperature control. This is particularly an issue because some critical



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murder records must be kept forever. There is a self-operating move to electronic file storage with a temporary employee, but it is not sufficient to add historical records to an electronic system, a Federal government recommendation.

By State regulation any county with a population of over 500,000 must have a Medical Examiner's office. Milwaukee County therefore provides services for Kenosha, Racine and Ozaukee Counties, which the County charges for. That revenue is allocated to the Medical Examiner's office and used in the County general fund to offset operating expenses.

Milwaukee County Comprehensive Facilities Plan User Interviews, Wednesday August 22, 2012 Racine County Economic Development Corporation

Interviewed:

Gordy Kacala, Executive Director RCEDC

Kate Walker, CATI Business Director, Gateway Technical College

Narrative:

Center for Advanced Technology & Innovation (CATI) Development and Closing

CATI was considered the typical "Innovation Center" when opened in 2001 and was a joint effort of CATI/RCEDC/Gateway/Racine County. With only moderate success it was felt the mission was too broad and did not focus, nor generate incubator business offshoots. This was the style of other incubators around the country at that time. Since then there has been a great deal of competition for this type of tenant in all incubator spaces. "90% of these facilities lose money".

Because CATI was not as successful, it was dissolved in 2010 and efforts are now focused on IP solutions. This has been undertaken with an EDA Federal grant. As a result the Integrated Manufacturing & Engineering Technology Center (IMET) has been formed using some of the existing space and an addition specifically focused on tech manufacturing methods. The Fabrication Lab from MIT is the model used for this concept.

There is now a great deal of competition in the incubator market for tenants. Many universities and two year programs sponsor or are associated with incubators or innovation centers. The most successful ones are associated with large universities like UW. There are several in the Milwaukee market that are directly competitors for the Milwaukee Tech Park Innovation Center, like MATC North/South and the Milwaukee Innovation Center in Grand Avenue. Many of these new spaces are evolving into "drop-in" spaces where clients can use office space for short periods of time.

Therese Felner, President Wisconsin Incubator Association may be a resource for more information if needed.
TMP 09/07/12

Milwaukee County Comprehensive Facilities Study User Interviews, Thursday August 30, 2012 Family Care Services/Clerk of Circuit Court

Interviewed:

Maria Ledger, Director of Family Care Services



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Narrative:

Milwaukee County Courthouse/Family Care Services:

Family Care Services is a MCO (Managed Care Organization) serving some 7800 people in Milwaukee County with a \$280mm annual operating budget. Services are provided to anyone over 60-years and persons with disabilities under-60. The long term goal is for clients to be independent. Services are mandated by regulation and must be physically separate from the County Department on Aging and Persons with Disabilities. The staff manages some 800 contracts to provide services to their clients.

The department was formally in the Reuss Federal Building and liked that space very much. They moved to the Courthouse in 2010 and occupy the west end of the 3rd floor. The department has approximately 91 employees with 15 +/- in rented space at the Wil-O-Way facilities in Underwood Park. This causes some communication problems since the work is not discrete to each location. They currently have 5 to 6 offices and 25+ work stations in the Courthouse with 5 to 6 cubes available for additional hires.

The access to the County Board and County Executive is important along with safety and general accessibility that the Courthouse provides. Occasionally they have former disgruntled clients and it is good to have security readily available. Training is generally done at Wil-O-Way facilities in Underwood Park since they have the only large meeting rooms available. Lack of public transportation at Wil-O-Way continues to be a problem.

In touring the office space it appeared the cubicles were on the small side and there were some confusing isles and potentially code violation issues with layout and access. It is one more example of adaptive use of a County facility. Ms. Ledger covets the Election Commission space that in effect truncates the Family Care Services office spaces on the Courthouse third floor.

Interviewed:

John Barrett, Clerk of Courts

Jim Smith,

David Ehlinger, Fiscal Operations Administrator

Narrative:

Milwaukee County Courthouse, First Floor

The Clerk of Courts provides Jury Management Services, Court Reporters, Court Commissioners, Court Filing Services, Records Management and Fee Collection Services for the County. It therefore must be located in the Courthouse and for the most part is on the first floor. Services are mandated by US Supreme Court rulings and State of Wisconsin regulations. For example, some records must be kept by the Clerk for at least 75-years. The office processes and stores approximately 9-million separate records annually. The Clerk's Office handles the processing of approximately 150K cases filed per year with \$18mm collected in fees and another \$5mm from the State of Wisconsin. The Clerk of Courts provides services in five separate locations, Children's Court, Safety Building, Criminal Justice Facility, Mental Health Center and Courthouse with 294 FTE County employees.

Paper records are in several locations throughout the Courthouse. There is some electronic scanning of records done in-house and \$600,000 in the County Budget to begin a project to scan records with an outside contractor. Records must be scanned using State of Wisconsin equipment. County Facilities cross charges for storage in some facilities and Mezzanine, 2nd floor, lower level G-9, Safety Building and Children's Court Center all contain records.

Security continues to be an issue throughout the Clerk's areas because of the population served. Additional visible County Sheriff's would be helpful in several areas. This is true with the 22 Court Commissioners who have no security but a panic button in their small working spaces.



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Milwaukee County Comprehensive Facilities Study User Interview, Thursday August 16, 2012 Milwaukee County Judicial District 1

Interviewed:

Jeffery A. Kremers, Chief Judge

Bruce M. Harvey, District Court Administrator

Narrative:

In general the Courthouse is inadequate especially based on the current standards for criminal justice. There are in excess of 155,000 cases processed through County Courts per year. The physical layout of courts is unsafe, especially for criminal courts on floors 5/6/7 where judges, jurists, victims, attorneys, families and the Sheriff's Department moving criminals are mixed together in hallways and areas getting to courtrooms. The US Marshall's office did an audit of security and noted it will be "when a tragedy occurs, not if". As an example Judge Kremers felt Dane County Courts are much better.

Civil Courts handle 60-70,000 cases per year and their courtroom areas seem to be adequate with good file space. There are issues with ADA compliance in the Civil Courts where the jury deliberation rooms are all up a flight of stairs. Although this is not a major issue, primarily because there are few disabled jurists, it can cause accommodation problems. It has not been addressed because of fear that it could trigger other compliance requirements.

Children's Court in Wauwatosa at the County Grounds is in a totally wrong location. Most users are from the inner city and have a difficulty with public transportation getting to this site. It is in a bad location for judges and jurists who sometimes have to be in two locations (Courthouse/County Grounds) for a single issue/case. Children's Court should be with or adjacent to Family Court for efficiency.

The lack of maintenance in the Courthouse is visible and creates problems with HVAC, elevators, etc. Much of this is related to fewer knowledgeable County staff to address issues throughout the building.

Signage throughout the Courthouse is a problem, especially for the court system. It is old and has not been maintained. The Judicial District Security Committee is looking at a solution including a completely new signage/way-finding system similar to healthcare or universities. They will make a recommendation to the County Executive when they have assembled necessary information including sign types and budgets. Hopefully this will include the entire Courthouse not just courts.

Although the Courthouse has important historical significance it may be time to consider a "super plan" to move criminal and juvenile courts, DA's offices and court administration to a new facility, ideally located in a new building on the old Safety Building site. It could be connected to the Criminal Justice Facility and Courthouse while leaving Civil, Family and Probate courts in the existing Courthouse. This would remove a partially used antiquated building from the county roles and could potentially create a more efficient court system.

Although Judge Kremer and Administrator Harvey were looking for an "ideal" solution, they were both realistic and understood the challenges facing Milwaukee County. They felt there may have been a lost opportunity/catalyst to make significant improvements/changes when the Courthouse Annex was removed for the development of the Marquette Interchange a number of years ago.

The Clerk of Circuit Court (John Barrett) is a key manager for the court system and allocates space and budgets for court facilities. It was felt he should be interviewed as part of the process to better understand Courthouse functions. TMP/08/16/12



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Milwaukee County Comprehensive Facilities Study User Interview, Thursday August 16, 2012 Milwaukee County Department on Aging

Interviewed:

Stephanie Stein, Director, Department on Aging
Diane Beckley, Program Coordinator, Department on Aging

Narrative:

Coggs Center:

Coggs offers fine office space. Sufficient for staffing, but difficult for older adults on commissions and councils that are required by legislative action and attend meetings at the building.

Parking and exterior security is an issue because of the neighborhood with visitor parking all on surrounding streets. People must use the north loading dock for handicap access. The front entrance can be confusing especially for older adults. The building "administration" is run by State of Wisconsin. In general entire facility is not conducive for older adults. The building is generally maintained to their satisfaction. They much preferred the Reuss Federal Building to this location/building. They were in Reuss 5+ years then refused to go to City Campus, so moved to Coggs about 2-years ago.

Senior Centers:

Sites are: Kelly Senior Center/McGovern Park Senior Center/Rose Park Senior Center/Washington Park Senior Center/Wilson Park Senior Center

They were originally the responsibility of Milwaukee County Parks because they are in County parks. They were moved to Department of Aging in 1994/5. None of the buildings was built as a senior center. New programming was instituted in 1997/8 and programs are filled to capacity. Programming is now run by the "Interfaith Program for Older Adults", a not for profit, charitable organization under contract to County. The County must supply services through agency like Interfaith because of state and federal regulations. The perceived value of Senior Centers is very high in the community.

The Department of Aging staff prepares a budget for capital projects and "major" maintenance that is part of the standard County budgeting process. Parks is responsible for grounds and parking lots. County supplies one maintenance man for small service work in all five buildings. All work "from the walls out" goes through County Facilities and projects are funded in the normal County budget cycle. Other funding is done through Interfaith fund and fund raising with monies used for things like tables, interior décor improvements, etc. There have been no increases in tax levies for senior programming for over 10 years and current programming is self-sustaining.

All sites are currently ADA compliant and are not considered "tear-downs" except for Kelly. (of note is there was significant spending in Kelly Center which was done last year. This spending seems out of place for a building that has structural problems and may be eventually given up)

There have been discussions in the past about doing public/private development projects (for example: senior housing with senior centers) in or near current locations. These generally get "shot down" by various boards feeling it is a step to "privatizing" some of the treasured County park system.



Appendix C - Summary Occupancy Data – Selected Properties

APPENDIX C

Summary Occupancy Data



Appendix C - Summary Occupancy Data – Selected Properties

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Appendix C - Summary Occupancy Data – Selected Properties

COURTHOUSE												
Dept.	WST SF	Accessory	Vacant	Net Usable	Suite Gross SF	Building Gross SF	Proposed SF/WST	FTE	Revised Prop.	216 SF space	Attnys	Storage
County Board	6,580	9,454		16,034	24,622	38,888	7,440	61	5,712	3,420		1,010
County Executive	2,138	3,536		5,674	8,535	9,489	1,096	10	816	180		243
Office of Persons with Disabilities	668	800		1,468	1,468	2,242	668	4	668			350
Risk Management	904	670		1,574	1,677	2,744	488	5	342			372
Personnel Review Board	689	0		689	755	1,107	224	13.5	144			0
Corporation Counsel	4,070	2,209		6,279	8,689	12,236	2,768	22	2,238			694
DAS - Labor Relations	880	980		1,860	1,860	1,206	416	4	294			156
DAS - Human Resources	2,233	9,561		11,794	17,814	34,336	2,838	29.35	2,081			3,788
DAS - Employee Benefits	1,790	1,380		3,170	4,010	2,066	1,824	20	1,308			1,380
DAS - Fiscal Admin Accounting	5,603	2,466	2,772	10,841	16,132	16,348	4,280	55	3,042			930
DAS - Information Management Services	1,571	1,282		2,853	7,374	11,318	1,384	18	1,212			103
Child Support	8,608	4,962	3,064	16,634	30,733	44,812	11,056	136.5	8,226			1,838
Clerk of Courts - Register in Probate	2,021	6,404		8,425	1,011	20,158	1,544	19	1,128			5,076
Clerk of Courts - Admin	2,262	2,008	180	4,270	7,019	5,560	1,624	15	1,332	180		348
Clerk of Courts - Jury Mgmt	360	5,217		5,577	5,857	7,862	448	6.5	312			0
Clerk of Courts - Civil	2,780	8,227		11,007	11,997	150,540	2,880	44	2,064			7,361
Election Commission	700	1,213		1,913	2,678	4,708	256	6	144			1,005
County Treasurer	1,452	3,027		4,479	6,437	6,437	856	9.5	612	180		1,468
County Clerk	1,295	3,055		4,350	5,044	6,615	632	7	468	180		1,300
Register of Deeds	3,250	7,674	105	10,924	20,165	29,486	2,800	40	2,124	180		5,423
Private Tenants					5,062							
Reuss Bldg (moved to courthouse)	14,284	8,283	1,520	30,647	45,971		16,092	172	10,866			
Total	64,138	82,408	7,641	160,462	233,110	408,158	61,614	697.35	45,133	4,320		32,845
SAFETY BUILDING												
Dept.	WST SF	Accessory	Vacant	Net Usable	Suite Gross SF	Building Gross SF	Proposed SF/WST	FTE	Revised Prop.	216 SF space	Attnys	Storage
IMSD	432	0		432	8,864	5,690	192	3	144			0
Clerk of Court - Criminal Division				0	60,075	204,476						0
Sheriff	12,539	14,117	609	27,235	63,329	99,787	9,920	132	7350	180		4438
District Attorney	24,736	8,381	712	33,829	41,213	88,866	23,452	210	18144		12000	0
Private Tenants				11,017	5,690							0
Total	37,707	22,498	1,321	72,513	179,171	398,819	33,564	345	25,638	180	12000	4438
MARCIA COGGS												
Dept.	WST SF	Accessory	Vacant	Net Usable	Suite Gross SF	Building Gross SF	Proposed SF/WST	FTE	Revised Prop.	216 SF space	Attnys	Storage
County Health Related Programs (EMS)	2,294	1,296		3,590	11,449		1,424	18.5	888			0
Directors Office	347	1,143		1,490	1,515		224	2	198			0
Management Services Division	3,225	2,182		5,407	32,187		2,696	34	1,836			0
Housing Division	2,111	221		2,332	4,260		2,360	30	1,542			27
IMSD	221	0		221	581		168	2	96			0
Private Tenants					7,079							0
Totals	8,198	4,842	0	13,040	57,071		6,872	86.5	4,560			27
CITY CAMPUS												
Dept.	WST SF	Accessory	Vacant	Net Usable	Suite Gross SF	Building Gross SF	Proposed SF/WST	FTE	Revised Prop.	216 SF space	Attnys	Storage
Disadvantaged Business Development	1,056	1,634	590	3,280	5,679	7,423	432	5	312			926
County Board - Audit	3,377	2,750	300	6,427	11,982	15,850	1,928	19	1,422			547
Information Management Services	6,760	911		7,671	17,337	12,272	4,464	47.5	3,012			0
Procurement	1,416	1,374	230	3,020	4,648	6,136	656	7	456			574
Department of Trans & Facilities Mgmt.	6,802	6,486	2,282	15,570	22,253	26,572	3,704	37	2,238			3,672
Transportation Services	2,577	2,554	1,982	7,113	9,381	12,015	1,312	12	882			682
Director's Office	1,843	682	273	2,798	4,100	4,007	1,040	7	780			300
Real Estate	1,008		336	1,344	1,744	2,616	400	4	264			0
Total	24,839	16,391	5,993	47,223	77,124	86,891	13,936	138.5	9,366			6,701
TOTALS												
Dept.	WST SF	Accessory	Vacant	Net Usable	Suite Gross SF	Building Gross SF	Proposed SF/WST	FTE	Revised Prop.	216 SF space	Attnys	Storage
All	134,882	126,139	14,955	293,238	546,476	893,868	115,986	1,267	84,697	4,500	12,000	44,011
% of current space							85.99%		62.79%			8.05%
Source: Updated estimates from September 2009 study by Continuum Architects												



Appendix C - Summary Occupancy Data – Selected Properties

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Appendix D – Sample Portfolio Metrics

APPENDIX D

Sample Portfolio Metrics for tracking progress and improving performance in portfolio, facilities and project management



Appendix D – Sample Portfolio Metrics

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Appendix D – Sample Portfolio Metrics

Overall Portfolio Metrics	Description and Notes	Recommended KPIs	Required - tracked for internal performance
Client Relationship			
Client Satisfaction Survey	Measured annually	X	X
Client Satisfaction - Dashboard	Dashboard is "Green" on overall account satisfaction and "NO" Reds using the a Dashboard tool.	X	X
Account-Specific Customer Satisfaction	Survey ratings are usually on a 4 or 5 point scale. Account metric may be based on a score target or defined as a % of scores higher than mid-point (e.g. scores of 4 or 5 on a 5-point scale or scores of 3 or 4 on a 4-point scale.)	X	
Client-facing Scorecard Results	Overall score achieved on any client-facing Balanced Scorecard in use on the account. Scoring system varies by account. (e.g. % out of 100% or 1 to 5 scale, etc.)	X	
Financial Performance - Value Creation			
Portfolio Cost Reduction			
Budget vs. Actual - Occupancy Costs	Budget vs actual variance for main categories of Occupancy Costs of the portfolio.	X	X
Occupancy Cost per employee (or FTE)	Occupancy cost divided by number of employees or full time equivalents. Can be measured against a target or year-over-year trend.	X	X
Reduction in Total Occupancy Cost	Reduction in portfolio's total occupancy costs (e.g. rent, utilities, maintenance, etc.) compared to year-over-year totals. Note: Total occupancy cost of real estate portfolio varies by organization. Metric is based on accounting results versus tracking of individual savings initiatives.	X	
Total Occupancy Costs per SF	Total cost of the real estate portfolio divided by the gross area (SF) of the facilities, regardless of their occupancy. Tracked over time to show decrease/increase versus target. This can also be tracked and analyzed by property type, department or geography.	X	
Total Occupancy Costs per occupied SF	Total cost of the real estate portfolio divided by the gross area (SF) that is being occupied by the owner/user of the facilities.		
Total "Infrastructure" Cost per Employee	Total cost required to house and equip an employee -- includes all real estate occupancy costs, facilities services, furniture, telecom, and technology cost, etc. Defining components of total infrastructure cost varies by organization.		
Value Add/Cost Savings and Cost Avoidance			
Cost Savings Initiatives Completed	Annual dollar value of initiatives implemented and completed. Based on reductions and cost avoidance in operating and/or capital expense. From all service lines and overall strategies. Best measured against pre-determined targets.	X	X
Cost Savings Initiatives Identified	Annual dollar value of initiatives identified. Based on reductions and cost avoidance in operating and/or capital expense. From all service lines and overall strategies. Best measured against pre-determined targets.	X	
Expense Reduction	Run rate reduction in facilities team costs (reimbursed staff and operating expenses)		
Cycle Time/Process Improvement			
Total Project Cycle time (incl real estate acquisition)	Average time it takes to complete projects from the official approval to proceed with the real estate project/ transaction until the construction is completed and the facility is occupied. Should be tracked against a past baseline to show improvement.	X	
Space Utilization			
Reduction of Vacant Space	Amount of decrease in total vacant SF year-over-year or versus an annual target.	X	
Portfolio Vacancy Rate	Percentage of all owned and leased areas that are currently vacant. Sum of all areas classified as vacant divided by the total portfolio area. Can be measured against targets or year-over-year trends.	X	
Square Footage per Workstation	Total gross area (sf) divided by the total number of existing workstations	X	
Square Footage per Person	Total gross area (sf) divided by the total number of employees (from whatever source, preferably from the space management application).	X	
Square Footage per FTE	Total gross area (sf) divided by the total number of FTE (from whatever source). This differs from the previous metric in that it may be needed to account for shift work, hoteling, or other business processes that affect population density.	X	
% Hourly Utilization for targeted locations presenting optimization opportunity (e.g., at or significantly below capacity; pending lease/sale action/opportunity)	Result of hour-by-hour utilization of offices, workstations, meeting areas, etc. as a % of total occupied (less structurally vacant) space. Study targets specific locations with key attributes, e.g., those with growth challenges (at or over assigned capacity), those below capacity, and/or those with pending lease/sale options/opportunities	X	
% of Private Offices (vs Open workstations)	Percent of private offices divided by total workstations including open plan (cubicles)		
Forecasting			
Employee growth trend, including future FTE estimates	Trend line over a period of history, showing number of employees versus time.		
Real estate portfolio size growth trend, including future estimates	Trend line over a period of history, showing amount of total square footage against time.		
Budgeting forecast trends	Trend accuracy in forecasting budget		
Real Estate portfolio cost trend, including future estimates	Trend line over a period of history, showing amount of total occupancy cost against time.		



Appendix D – Sample Portfolio Metrics

Overall Portfolio Metrics	Description and Notes	Recommended KPIs	Required - tracked for internal performance
Financial Performance - Internal Department			
Variance to Budget	Occupancy cost for the department (all services) compared to budget.	X	X
Staff costs	Total annual amount of salary & benefits of department staff.	X	X
Resource Management			
Employee Satisfaction	Measured annually through standardized electronic survey provided to each employee.	X	X
Employee Turnover	% annual turnover of all account employees as measured and reported by HR. Adjust by "planned turnover" eg. Employees promoted or otherwise positive impact.	X	X
Hiring Cycle Time	Average number of days to fill new or replacement positions as measured & reported by HR.	X	X
OSHA - injury and illness	OSHA - # of recorded work-related injuries or illnesses at the account	X	X
Supplier Diversity:			
Diversified Supplier Spend (DBE)	Total costs paid to diversified contractors or sub-contractors. (DBE)	X	
Diversified Supplier Spend versus Target	Total costs paid to DBE contractors or sub-contractors, compared to an established target.	X	
3rd party supplier performance assessment	Supplier shall comply with the client's supplier diversity requirements		
General Statistics (Data Elements)			
Total Portfolio Area	Sum of all leased and owned areas, using gross area.		
Number of Properties	Count of all leased and owned buildings or locations.		
Owned Area	Sum of all owned areas, using gross area. Total Gross Square Feet (GSA).		
Leased Area	Sum of all leased areas, using gross area. Total leased GSF.		
Percent Owned vs Leased	The percentage of the total portfolio area that is owned (versus leased). Calculate total owned GSF over total GSF (or based on # of properties).		
Geographic Distribution of Portfolio	Geographic Dispersion (based on SF or # or properties)		
Business Unit Breakdown	Distribution of portfolio by Department (based on SF or # or properties)		
Total Occupancy Costs	Total cost of e real estate portfolio. (e.g. rent, utilities, maintenance, etc.)		
Portfolio Value	Total book value of the owned properties.		
Total Head Count of Real Estate staff	Count of staff assigned to the internal real estate team. Can be shown against a target value.		
Total Head Count of Service Provider	Count of our staff assigned to the account, on site, on a daily basis. Can be shown against a target value.		
Headcount Breakdown	For both Real Estate and vendors, breakdown of headcount by org function or service line (e.g. TM, FM, Accounting, Relationship Mgrs, etc.)		
Total personnel cost of facilities staff	Sum of all employee costs for facilities staff.		
Total personnel cost of Service Provider	Sum of service provider employee costs for staff on the project. Can be shown against a target value.		
Vacant area	Total area of all vacant spaces.		
Number of vacant locations	Count of all leased and owned buildings or locations that have no occupancy. Count any building or lease that has no occupied space.		



Appendix D – Sample Portfolio Metrics

Project Management Metrics	Description and Notes	Recommended KPIs	Required - tracked for internal performance
Client Relationship			
Customer Satisfaction - Individual Project Rating	Results of satisfaction surveys sent on all projects or random sample. Can be from end-user or facilities contact (or both). May be part of more inclusive survey that includes total project incl Transaction Mgt. The Process should have a target for both satisfied and very satisfied. Response ratings should be tracked and the results should have sufficient project type, client type, granularity to learn from the process.	x	x
Overall Client Satisfaction - PJM	Overall customer satisfaction rating for PJM services	x	x
Financial Performance - Value Creation			
Value Creation Process	Annual dollar value of PJM-related initiatives implemented and completed. Based on savings from reductions and cost avoidance in capital expense and PJM managed operating expense. Best measured against pre-determined targets.	x	x
% projects completed within budget	Completing projects within budget- Percentage of projects completed within budget. Adjustments will be made for overruns created and approved by the client in advance. Measure budget vs. actual expense. Excludes moves, adds and changes.	x	
CapEx Management	Stewardship of the total CapEx under management by the County. Accuracy of Actual performance vs. budgeted performance over whatever period is required (Monthly, Quarterly, Annually) by department, location, etc.	x	
Average project cost per SF	Total cost of all completed projects divided by the Gross SF of the completed projects. Tracked year-over-year to show trend or against a target.		
Average project cost per workstation	Total cost of all completed projects divided by the number of workstations provided in projects. Tracked year-over-year to show trend or against a target.		
Special Variance Metrics	i.e., Signage project variance actual to budget		
Capital Project Variance	Achieve favorable variance to budget- County initiated and managed Capital Projects		
Budget Management	Projects closed during the quarter in aggregate are within budget		
Variance Trends	Measure Soft Costs/Hard Costs, Design Cost/Construction Cost. Project Value/PM, Project Volume/PM, Cost/Project-Evaluation based on trend over time.		
Service Level Performance			
Cycle Time/Process Improvement:			
Percent projects on time	Project completed on time divided by total number of projects. Tracked year-over-year to show trend or against a target.	x	x
Average project cycle time	Average of the close time minus the open time for project work orders closed during the period being considered. Tracked year-over-year to show trend or against a target.	x	
Project Delivery Targets	Projects that close each quarter against plan. Measurement is based on a mutual agreed upon construction completion date at time construction schedule is approved and within County controllable issues.		
Punch list close out	The percentage of projects that have the punch list closed out on or before 30 days from the date of project substantial completion.		
Final project close out	Projects where all close out steps are completed, all invoices approved for payment and the project file closed out within a predefined number of days of project substantial completion. Metric can either be by percentage or average time.		
Delivery Process Excellence (Innovation)	Implementation of project processes, procedures, and technology that are innovative to an account to improve operating performance. Metric is typically by number of initiatives implemented.		
Moves, Adds, Changes Process	Milestone schedule met (90% of projects started and completed on-time). Adherence to standards and playbook (unless exception approved). Architectural/MEP Drawings Received/Archived		
Reporting/Processing/Filing			
Project Filing/Data	As built drawings and floor plans, floor plans and space utilization data are completed and up to date and an audit process is in place with a commitment to some level of accuracy/timeliness/completion.		
Report Submission, financial processing	Timely preparation and submission of reports, accruals and budgets- Annual Capital Budget, Weekly Project Management Report and Monthly Metric Report.		
Resource Management			
Cost to Manage	A measure of County's PJM delivery cost/Total Costs Managed by that effort. This is the best measure of effectiveness of performance and the efficiency of delivery. This internal account benchmark should be used as a trend analysis to review efficiency over time.	x	x
Projects completed per FTE	Total number of projects completed per FTE		
Compliance			
Compliance Standards	% in compliance annually for PJM Standards	x	x
General Statistics/Project Activity (Data Elements):			
Projects completed	Number of projects completed YTD or in a year.		
Total \$ Volume of Completed Projects	Total project costs of all completed projects.		
Project count by status	Total number of outstanding projects by status of: requested, funded, initiated, completed.		
Breakdown of project types	Count of "current" projects by project type. (Needs definition of "current" projects.) Assume project types are defined.		
Project Invoices per month	Count of project related invoices paid per month.		



Appendix D – Sample Portfolio Metrics

Facilities Management Metrics	Description and Notes	Recommended KPIs	Required - tracked for internal performance
Client Relationship			
Customer Satisfaction Survey results	Results of customer satisfaction surveys, usually versus targets per category. End users (space occupiers) are generally surveyed on a regular basis, but can also be a random sampling. Rolls up to overall account sat rating.	x	x
Overall Client Satisfaction - FM	Overall customer satisfaction rating for FM services	x	x
Work Order Customer Satisfaction Performance	Average Work Order Customer Satisfaction Performance from surveys		
Number of Customer Service Complaints	# of complaints about the service provided (not the condition of the space). This could include slow response or insufficient resolution of a work order. Only count "formal" complaints (e.g. emails, ones called into the call center, etc.), either raw count or compared year-over-year.		
Financial Performance - Value Creation			
Cost Savings Initiatives Completed	Annual dollar value of FM-related initiatives implemented and completed. Based on savings from reductions and cost avoidance in operating and/or capital expense. Best measured against pre-determined targets.	x	x
Cost Savings Initiatives Identified	Annual dollar value of FM-related initiatives identified. Based on savings from reductions and cost avoidance in operating and/or capital expense. Best measured against pre-determined targets.	x	
\$ Savings - based on tracked cost savings initiatives and projects (alternative Free Cash Flow)	Total savings from individually tracked cost savings/avoidance initiatives. Should be broken out by one-time savings versus those with annual run rate savings. Helps track budget \$ available for re-investment.		
\$ Savings - comparing total costs to budget or prior year	Amount final operating costs are below budget. Can also be tracked as year-over-year savings. (Note: overlap of this with individually track cost savings initiatives may result in double-counting of savings)		
Cost Savings Initiatives Completed	Annual dollar value of FM-related initiatives implemented and completed. Based on increase in cash flow from reductions and cost avoidance in operating and/or capital expense. Best measured against pre-determined targets.	x	x
Operating Cost Variance	Budget vs. YTD Actual of Controllable Expenditures	x	x
Capital Cost Variance	Budget vs. Actual Cost of Capital Improvement		
Managing Occupancy Cost			
Controllable Operating Expenses per SF	Total FM costs divided by gross area of the included properties. "Controllable costs" are variable costs such as utilities, maintenance and repairs, etc. Fixed costs such as rent or property taxes would not be considered controllable.		
Controllable Operating Expenses per SF per person served	Same as above, but then divided by number of employees (or occupied work-stations, etc.) Used to compare facilities within the portfolio.		
Controllable operating expenses per SF broken out for individual categories	Annual janitorial, electrical maintenance, HVAC maintenance costs, etc. divided by gross area of the included properties		
Total FM Costs per SF	Total FM Costs (Management fees and reimbursed expenses) per SF of space managed		
Total FM Costs as a % of total occupancy costs	Total FM Costs (Management fees and reimbursed expenses) as a % of total occupancy costs		
Reduction in total number of third-party vendor contracts	Usually shown as a % decrease. Indicates the extent of vendor consolidation efforts.		
Service Level Performance			
Management Level Compared to Best-In-Class	Determines service level against weighted metrics assigned by the functional leaders.		
Management Productivity Index	Measures the amount of output created.		
Management Quality Index	Measures achievement or excellence of service		
Management Compliance Index	Measures adherence to policies and best practices		
Is Facilities Management function, including, Facilities Managers, functional experts etc. less than 1 FTE per 100k sq ft for owned and NNN leased sites.	Proper staffing ensures there is enough technical expertise is available across accounts and for effective reimbursability.		
Videoconference technical success rate	80% of videoconference technical success rate		
Conference room scheduling	Meeting Requests received by 3PM Responded by 5PM. 95% of meeting requests received by 3PM responded by 5PM		



Appendix D – Sample Portfolio Metrics

Facilities Management Metrics	Description and Notes	Recommended KPIs	Required - tracked for internal performance
Service Level Performance			
Critical Environments			
Critical Environments Level Compared to Best-In-Class	Determines service level against weighted metrics assigned by the functional leaders.		
Critical Environments Productivity Index	Measures the amount of output created.		
Critical Environments Quality Index	Measures achievement or excellence of service		
Critical Environments Compliance Index	Measures adherence to policies and best practices		
Critical Equipment "Up Time"	Reports on critical equipment availability measured against specified service levels		
Number of "Incidents" with business impact	Incidents such as fire alarms or other emergencies requiring building evacuations or other interruptions to client's productivity		
Non-conformance Benchmark	Non-conformance rate (NCR) does not exceed agreed targets and does not include any repetitive or critical service non-conformances (NC's)		
Operations and Maintenance			
O&M Level Compared to Best-In-Class	Determines service level against weighted metrics assigned by the functional leaders.		
O&M Productivity Index	Measures the amount of output created.		
O&M Quality Index	Measures achievement or excellence of service		
O&M Compliance Index	Measures adherence to policies and best practices		
Service Insight			
Percent of work orders initiated by end users (vs. FM personnel)	Count work orders resulting from service requests by facility end users, divided by the total number of work orders. A lower % indicates a proactive FM team.		
Mailroom, Janitorial, Cafeteria and Security Services Survey	Customer Feedback- Mailroom, Janitorial, Cafeteria and Security Services Survey. Percentage of the sum of the excellent, very good and good scores		
Response time	% of corrective WO's completed within prescribed response times, broken out by Priority (usually 1 thru 5)		
Percent of work orders submitted via web	Number of work orders submitted via web divided by total number of work orders received		
Average work order cycle time	Average of the close time minus the open time for work orders closed during the period being considered. (Should be reported by priority)		
Average wait time during calls to Call Center	For all inbound calls, average time from dial (or connection) until a person is reached.		
Number of abandoned calls at Call Center	Count of all inbound calls that hung up before reaching a person		
Number of outstanding work orders	Count of open work orders (should probably be per priority)		
Corrective work orders assigned	Monthly count of work orders assigned that were in response to problems found or requests; that is, not preventive. (Not to be confused with service requests.)		
Corrective work orders completed	Monthly count of corrective work orders completed.		
Number of work orders by type	Monthly count of new work orders created in a month, classified by type (e.g. hot/cold, housekeeping, moves, etc)		
Number of work orders completed by type	Monthly count of work orders closed in a month, broken down by type. (HVAC, electrical, plumbing, landscape, Janitorial, etc)		
Facilities Invoices per month	Count of all facilities or portfolio related invoices paid per month.		
Total number of incoming calls to Call Center	Measure of call center activity. Count inbound calls per reporting period.		
Total number of outbound calls from Call Center	Measure of call center activity. Count outbound calls per reporting period.		
Number of work orders initiated by Call Center	Count work orders where creator is the call center or someone from the call center.		
Work Turn Around Time	Average time to complete a work order		
Abandoned Calls	Average abandoned call rate (should be less than 5.5%)		
Service Desk Efficiency	Average seconds to answer call (20 seconds)		
Preventive maintenance work orders assigned	Monthly count of preventive maintenance work orders assigned		
Preventive maintenance work orders completed	Monthly count of preventive maintenance work orders completed		
Completion of building and equipment audits/surveys	Routine condition surveys of owned plant, equipment and buildings.		
Timely completion of reports	% of reports completed by each specified deadline (e.g. within 5 days of end of each month etc.)		
Completion of action items	Close out of action items from monthly review meetings against agreed timelines		



Appendix D – Sample Portfolio Metrics

Facilities Management Metrics	Description and Notes	Recommended KPIs	Required - tracked for internal performance
Service Level Performance			
Utilities			
Utilities & Sustainability Level Compared to Best-In-Class	Determines service level against weighted metrics assigned by the functional leaders.		
Utilities & Sustainability Productivity Index	Measures the amount of output created.		
Utilities & Sustainability Quality Index	Measures achievement or excellence of service		
Utilities & Sustainability Compliance Index	Measures adherence to policies and best practices		
Rate Tracking	Site energy and utility consumption and waste generation rates fall within target benchmark performance levels.		
Service Interruption	No unplanned interruption of energy and utility supply caused by Supplier		
Energy Savings Tracking	Energy savings tracked on a quarterly basis, and over a period of a year achieve an agreed upon amount of reduction based on fixed baseline consumption when corrected for weather and hours of operation.		
Recycling	Develop and implement a comprehensive recycling program		
Health, Safety, Security and Environment (HSSE)			
HSSE Level Compared to Best-In-Class	Determines service level against weighted metrics assigned by the functional leaders.		
HSSE Productivity Index	Measures the amount of output created.		
HSSE Quality Index	Measures achievement or excellence of service		
HSSE Compliance Index	Measures adherence to policies and best practices		
Safety			
Contractor Motor Vehicle Accidents	# of total reportable vehicle accidents by contract employees for every million miles driven on client business.		
Incident reports or knowledge of equipment failures	# of incident reports or knowledge of failures in Tier Level A, B or C critical facilities.		
Employee/Contractor LTIR (#)	Number of lost time incidents per 200K hours worked. Any work related injury/illness (including fatalities) which result in at least one lost workday after the day of the incident. Includes any incidents among contractors used for IPM.		
Employee/Contractor TRIR (#)	Actual # of incidents 1,000,000/5. Total OSHA recordable incidents.		
Environmental Compliance	Ensure that 100% compliance with statutory permits and environmental regulations.		
OSHA Recordable Incidents	Incident reports generated by County for incidents impacting subs or caused by subs employees or guests		
Quarterly Critical Management	Comply with safety and security programs and policies; systems operate as intended		
Quarterly Strategic Management	Develop and maintain EHS Program		
Safety & Emergency Preparedness - Fire Drill Completion	All Facilities. 90% of Fire Drills complete		
Safety & Emergency Preparedness - Hazard Surveillance Completion	All Facilities. 90% of Hazard Surveillance Completed		
Safety Program - Approved Contractors on Site	Ensure that all work requiring a work permit is properly permitted, and that work is conducted in accordance with permit requirements		
Safety Program - ASA Compliance	Ensure that the appropriate level of ASA's are completed and documented		
Safety Program - HSSE Statutory Training Compliance	Ensure that personnel are current with all OSHA training requirements		
Safety Program - Job/Task HSSE Planning	Ensure that all tasks have a JSA, SPA or TSA prepared and communicated with employees		
Safety Program - Near Miss Incident Reports	Ensure that near misses are properly investigated and reported.		
Safety Program - Work Permit Compliance	Ensure that all work permit is properly permitted, and that work is conducted in accordance with permit requirements.		



Appendix D – Sample Portfolio Metrics

Facilities Management Metrics	Description and Notes	Recommended KPIs	Required - tracked for internal performance
Service Level Performance			
Security			
Security Audits	Scheduled, site independent, security assurance audits meet target score.		
Security Service Non-Conformance	Security quality control non-conformances does not exceed agreed targets and does not include any repetitive or critical service non conformances		
Substantial/Repeat Security Complaints	no substantial or repeat customer complaints related to responsiveness to service requests or unprofessional behavior of security staff		
Emergency Alarm Monitoring and Response Services Documentation	All security incidents are properly documented.		
Security Systems Reliability	Service outages are properly recorded and follow-up calls meet agreed response times (access control, electronic surveillance, emergency alarms)		
ID Badging Error Rate	Less than 5% error rate on ID badging error rate		
Rosters and Procedures Updates	100% of rosters and procedures updated monthly		
Requirement Compliance	Compliance with procurement and personnel authorization requirements		
Operational, financial and HSSE Reporting	The Monthly Operational, Financial and HSSE Reports are complete, accurate and issued on time.		
Sourcing			
Sourcing Level Compared to Best-In-Class	Determines service level against weighted metrics assigned by the functional leaders.		
Sourcing Productivity Index	Measures the amount of output created.		
Sourcing Quality Index	Measures achievement or excellence of service		
Sourcing Compliance Index	Measures adherence to policies and best practices		
Food Services			
Food Service Response Times	Food services response times are within the agreed time frames		
Food Service Customer Complaints	No substantial or repeat customer complaints regarding responsiveness to service requests, quality of food, food prices or Food Services related work and staff.		
Food Service Performance Indicators vs. Targets	Standard Food Service performance indicators meet operational performance targets		
Food Service Audits	Service Assurance - Scheduled, site independent, Food Services Assurance Audits meet target score		
Measurement of Food Service Non-Conformance Rates	Food Services quality contract non-conformance rate (NCR) does not exceed agreed targets and does not include any repetitive or critical service non-conformances (NC's)		
Janitorial Services			
Cleaning Service Response Time	Cleaning Services response times are within the agreed time frames.		
Substantial/Repeat Janitorial Complaints	No substantial or repeat customer complaints regarding responsiveness to service requests, quality of work or cleaning related work and staff		
Janitorial Audits	Scheduled, site independent, cleaning service assurance audits meets the target score.		
Janitorial Service Non-Conformance	Cleaning quality control non-conformance rate (NCR) does not exceed agreed targets and does not include any repetitive or critical service non-conformances (NC's)		
Supply Chain Management	Supply Chain Management- Third party supplier performance assessment. The performance and capability of third party suppliers are evaluated and proactively managed in terms of quality, cost, improvement and management.		
Resource Management			
Functional FTEs/100k Sqft	Measures productivity	X	X
Technical FTEs/100kSqft	Measures availability and reimbursability of technical leaders		
Management to Task Ratio	Management to Task Ratio	X	
General Statistics FM (Data Elements)			
SF	Square feet managed		
Project Type	Type of Facility Managed		
Personnel	Number, location and title of personnel		
Scope	Scope of assignment		
Contract Terms	Key Contracted Business Terms		



Appendix D – Sample Portfolio Metrics

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CBRE PRESENTS A FINAL REPORT

COMPREHENSIVE FACILITIES PLAN CONSULTING REPORT

Prepared for: Milwaukee County



February 11, 2013

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Appendix E – Building Inspection Reports

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Appendix E – Building Inspection Reports

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Appendix E – Building Inspection Reports

Building Inspections Approach

The Milwaukee County Portfolio (“the Portfolio”) assessment is based on a multi-faceted approach that included a physical property inspection of key properties (25 “walk-throughs”), an operations assessment of current real estate practices, an operating expense review and a strategic analysis of options based on the information gathered and interviews with key stakeholders. The space surveyed includes 50% of the non-special use space (over 3.6M SF; excludes museum, corrections, parks (except senior centers & the Wil-O-Ways) airport and zoo). It represents a variety of office, mental health, food service, elderly services and judicial space.

This Appendix is a compilation of the notes and observations from the 25 walk-throughs.

Milwaukee County Comprehensive Facilities Plan Building List & Contacts				
Asset ID	Site Name	Asset Name	Address	Square Feet
76	Courthouse Complex	Criminal Justice Facility	949 N. 9th Street	475,000
10	Courthouse Complex	Courthouse	901 N. 9th Street	1,021,000
30	Courthouse Complex	Safety Building	821 W. State Street	296,000
35	Community Correction	Community Correctional Center	1004 N. 10th Street	75,544
37	Community Correction	Medical Examiner	1004 N. 10th Street	73,830
1435	McGovern Park	McGovern Park Senior Center	5400 N 51st Blvd.	12,983
1830	Rose Park	Rose Park Senior Center	3045 N. MLK Drive	39,474
1990	Washington Park	Washington Park Senior Center	4420 W. Vliet Street	30,092
2680	Underwood Parkway	Wil-O-Way "U" Recreation Center	10602 W. Underwood Creek Parkway	8,975
2681	Underwood Parkway	Wil-O-Way "U" Wading Pool	10602 W. Underwood Creek Parkway	1,808
2950	Grant Park	Wil-O-Way "G" Recreation Center South	207 S. Lake Drive	10,509
3125	Warnimont Park	Kelly Nutrition Building	5400 S. Lake Drive	4,290
3130	Warnimont Park	Kelly Senior Center	5400 S. Lake Drive	10,300
3845	Wilson Park	Wilson Park Senior Center	2601 W. Howard Avenue	38,458
5000	Children's Court	Phillips Juvenile Justice Center	10201 Watertown Plank Road	219,539
5040	Mke. Regional Medical Center	D-16 Mental Health Center	9455 Watertown Plank Road	425,400
5060	Mke. Regional Medical Center	D-18 Food Service building	9150 Watertown Plank Road	35,028
5070	Mke. Regional Medical Center	D-19 Day Hospital	9201 Watertown Plank Road	129,433
5080	Mke. Regional Medical Center	D-20 Child and Adolescent Treatment Ctr	9501 Watertown Plank Road	182,787
5290	Research Park	M-01 Technology Innovation Center	10437 Innovation Drive	137,247
5600	Marcia Coggs Human Services	Marcia P. Coggs Human Service Center	1220 W. Vliet Street	222,482
5605	City Campus	City Campus Office Complex 9 Story	2711 W. Wells Street	129,989
5605	City Campus	City Campus Office 5 Story	2711 W. Wells Street	28,025
	City Campus	27th Street Store Front		19,366
	City Campus	Theater		9,116
Total Square Footage				3,636,675



Appendix E – Building Inspection Reports

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Appendix E – Building Inspection Reports

Courthouse – Courthouse Complex (ID: 10) – 901 North 9th Street

EUA Architects

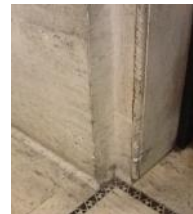
- Generally the basement walls and ceilings are in good condition, though there are some areas with salt damage from sidewalks above.
- Lots of old equipment, office furniture, etc. is stored in the basement corridors.
- When the courthouse annex was demolished, the maintenance shops and storage items were moved into the basement of the courthouse.
- Some areas on the façade have rust and dirt stains under windows, louvers, etc.
- Many of the exterior windows have been replaced, some original windows still exist.
- Some of the courtrooms have been maintained in good condition, others have worn carpet, wall paneling, lighting, and ceiling tiles beyond their useful life.
- The jury rooms are not handicap accessible. Stairs are the only means of access to the rooms.



Basement in generally good shape, some areas have salt, water damage



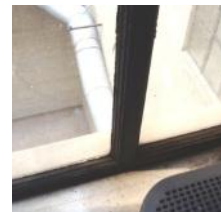
Basement corridors used as storage



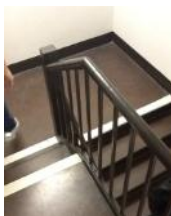
Floor and wall stone panels worn and dirty in a few high-traffic areas



Typical upper floor corridor. Floor, walls, ceiling generally in good condition, wear and tear evident in a few areas



Many windows have been replaced, some steel frame single pane windows remain



A typical stairwell



Most courtrooms have been remodeled, interior finishes are in good condition



Roofs generally in good condition, some caulking needed at parapets



7th floor children's courtroom ceiling tile, wall panels, and carpet are aged



Stairwell door. Many of the building's doors do not have ADA-compliant hardware.



Carpet in the 7th and 8th floor corridors is worn, stained



Parapets in good condition, some caulking needed



Appendix E – Building Inspection Reports

Singh Inspections

Mechanical:

■ Year Built:

- 1928–1932 — Original building mechanical systems.
- 1969 — 8th floor built-up air handling unit replacement, first chiller/cooling tower installation.
- 1970 — Second chiller/cooling tower installation.
- 1980 — Third chiller/cooling tower installation.
- 1984 — Ground floor built-up air handling units replacement. Exterior ductwork installation.
- 1986 — Fourth chiller/cooling tower installation.
- 1989 — Steam valve replacement at air handling units AHU-3 and AHU-4.
- 1990 — Computer room/film vault self-contained air conditioning units installation.
- 1991 — Cooling tower CT-1 and CT-2 replacement. Cafeteria renovation.
- 1993 — Temperature control air supply system renovation.
- 1994 — Shops area renovation: rooftop units, H&V units, dust collector installation.
- 2001 — Chillers CH-3 & CH-4 replacement (CH-1 & CH-2 deleted from the scope ???).
- Steam valve replacement at air handling units
- Various years – partial remodeling throughout the building.

■ Mechanical System Description:

- Heating — Building is supplied with steam through district heating/power plant steam mains. Steam systems consisting of steam supply/condensate return piping, condensate return pumps, and associated valving, accessories, and controls provides heat to building via perimeter steam radiators, terminal unit heaters, and built-up air handling unit steam heating coils. Hot water systems consisting of steam/condensate to heating hot water heat recovery heat exchangers, hot water pumps with variable frequency drives, hydronic accessories, valving, piping and controls provides



Steam to domestic HW heat exchanger



Steam to domestic HW heat exchanger



Steam to hot water heat exchanger



Wall convactor



Cast iron radiator



Built-up AHU steam coil



Condensate return pump



Appendix E – Building Inspection Reports

hot water air handling unit heating coils, finned tube radiation, and various heating terminal units. Two steam to hot water heat exchangers provide domestic hot water.

- Ventilation — Four dual duct air handling systems (110,000 cfm each, 250 HP supply fan motors, 75 HP return fan motors) complete with intake hoods/wall louvers, supply/return/exhaust ductwork, dual duct mixing boxes, supply/return/exhaust inlets/outlets, separate return/relief fans, and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building. Two of the units are located on the ground floor and the other two are in the penthouses on the 8th floor. Entrances are served by individual air handling units. The shop area is served by heating and ventilating only indoor air handling units. The shop area lunch room and offices are served by heating and cooling rooftop units.
- Air-conditioning — Four 325 tons water chillers/cooling towers complete with associated pumps, hydronic accessories, piping, valving, and controls generate chilled water to serve the building. Chilled water system distributes chilled water to building air handling unit cooling coils. Cooling tower/chiller/chilled water pumps range from 10 HP to 20 HP each. The shop area lunch room and offices are served by DX cooling rooftop units.
- Humidification — Building air handling units are provided with humidification control.
- Dust collector — Woodwork shop is provided with dust collector and air filtration unit.
- Kitchen exhaust — Kitchen includes kitchen exhaust hood/fan.
- Variable frequency drives (VFDs) — Air handling units supply and return fans have had VFDs installed within the last two years.



Cast iron radiator



Thermostat



Thermostat



Convactor



Dust collecting system



Air filtration unit



Condensate return pump



Appendix E – Building Inspection Reports

- Data room — space is served by self-contained temperature/humidity control Liebert unit.
- Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end of their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Chillers — 20 years (100%)
 - Cooling towers — 20 years (100%)
 - Rooftop units — 15 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Duct mounted coils — 20 years (100%)
 - Air compressors — 25 years (100%)
- Operational issues:
 - Heating
 - Air handling unit (six) heating coils and steam valves are in need of replacement.
 - Cooling coils are shut and should be replaced, condensate pans leak.
 - Ventilation
 - No major issues.
 - Air-conditioning
 - No major issues.



Vacuum condensate return pump



Entrance air handling unit



Built-up air handling unit



Return fan variable frequency drive



Wall louvers



Built-up air handling unit hot/cold decks



Light court exterior ductwork



Appendix E – Building Inspection Reports

- Major capital requirements:
 - Heating— establish time schedule and appropriate funds for gradual replacement of outdated heating system and equipment.
 - Ventilation — establish time schedule and appropriate funds for gradual replacement of outdated ventilation system and equipment.
 - Air conditioning — establish time schedule and appropriate funds for gradual replacement of outdated air conditioning system and equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- Existing 13kV electrical service equipment is approximately 47 years old per the 1965 record drawings. The two 13kV service feeds come from the local WE Energies power plant to the existing 13kV S&C switchgear, which has two feeds to the Safety Building, USS-12, the Courthouse Annex and 7th floor substations USS-6 and USS-6A. The system also consists of several 13kV double-ended substations (USS-1, USS-2, USS-3, USS-4, USS-5) with tie breakers. Given the age of the system, it is approaching or beyond its life expectancy and should be upgraded in the next 5 years.
- The existing emergency service is provided by a 175kW generator located in the basement. The generator is 24 years old per the 1988 record drawings.
- The existing fire alarm system is by Honeywell. The system underwent maintenance upgrades in 2007 per C023-06432 as-built drawings dated April 2007. Per the 2007 as-built drawings, all of the existing fire alarm initiating devices and control modules were to be replaced with new addressable devices. The system is connected to the Safety Building and the Criminal Justice Facility.
- The PA systems in the first, fourth and seventh floor courtrooms were installed in 2000 per project C006-09681 as-built drawings dated May 2000. However, in some of the courtrooms the cables for the push-to-talk microphones are draped across the floor and are a trip hazard. Recommend re-routing cables.
- The junction box and associated conduits on the ceiling of the tunnel outside of room B-34 in the basement are rusted and should be replaced.
- Steam and condensate piping is routed above the existing substation USS-12. A drain pan should be installed below the



Air intake/relief hood



Inline toilet exhaust fan



Light court exterior ductwork



Utility set fan



Dual duct mixing box



Kitchen exhaust fan



Data room self-contained air conditioner



Appendix E – Building Inspection Reports

piping to protect the substation. In addition, the substation USS-12 is located next to a corridor turned into a paint shop where there are paint fumes that are hazardous. Recommend ventilation or some form of separation of the two areas.

- The existing SquareD panel located inside of room MU8-4A is very old and should be replaced.
- The lighting in courtrooms 702 and 712 are recessed downlights with incandescent bulbs. Recommend replacement of light fixtures with more energy efficient fixtures such as fluorescents.
- Lighting in the majority of the corridors throughout the building consists of ornate fixtures, which are likely to be the incandescent type. Recommend upgrade of these fixtures.
- Several of the branch power panels are original to the building and should be replaced when the main substations are replaced.
- Security cameras appear to be in good shape.

Plumbing:

- Year Built:
 - 1927–1932 — Original building plumbing systems.
- Plumbing System Description:
 - Two mains provide water to the building. The domestic water service enters in the east side of the building and main enters the west side of the building into the utility service room. Domestic water booster pumps located in the basement mechanical room boost the city water pressure for the building.
 - One 12" steam main serves this building. It enters the building in the corner of the south west utility tunnel. The system consists of steam to water heat exchangers/converters with circulating pumps. Domestic hot water is generated using tube in shell heat exchangers with associated hot water storage tanks. A 225 gallon PVI steam water heater is used for the dishwasher.
 - Domestic water piping in the building appears to be a combination of galvanized steel, brass, and copper for the domestic water supply. Generally, the piping appeared to be old and in fair condition for its age with no observed leaks. There could be blockages or restrictions in flow due to the buildup of deposits on the inside walls of the piping. Most of the piping has asbestos insulation.
 - Soil, waste and vent piping consists of cast iron piping. Most cast iron piping that could be observed appeared to



Chiller/cooling tower/chilled water pumps



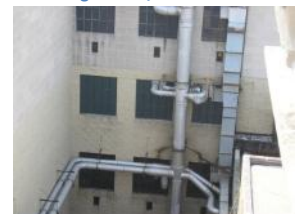
Centrifugal chiller



Cooling towers



Cooling towers/exterior ductwork



Light court exterior ductwork



Pneumatic temperature control panel



Pneumatic temperature control panel



Appendix E – Building Inspection Reports

be in fair condition for its age with no apparent leaks. Two City sewer mains serve this building (size is estimated at 12" for each). They exit at the east side of the building.

- Overall building plumbing system condition:
 - A new reduced pressure type backflow preventer should be provided on the building water service to protect the public water main.
 - The majority of plumbing fixtures and related trim in the building appears to be in good to fair condition and in general need of partial replacement.
 - The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
- Operational issues:
 - Existing plumbing fixtures cause energy loss year round.
 - Older plumbing system may not support the pressure and waste removal requirements of modern functions. When the piping system no longer serves the building's demands, or there are multiple failures, the system should be considered for replacement. There is evidence of pipe leaks (stained ceiling tile) and basement flooding (storm water back-up). For a localized failure, simply replace the section that failed.
- Major Capital Requirements:
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.
 - Some of the domestic water piping may be able to be reused, along with some of the drain piping. Drains should be rodded out, and new plumbing fixtures provided to respond to the proposed plan.
- Safety:
 - From a safety and efficiency perspective, these plumbing systems should be upgraded or changed in a thoughtful manner that provides required functionality.
- Summary:
 - All water, sanitary and storm plumbing systems are currently adequate to serve the building, as are the proposed new plumbing fixtures located in renovated areas.



BAS workstation



S&C 13.2kV Switchgear



S&C 13.2kV Switchgear



S&C 13.2kV Switchgear



Substation



Substation USS-2



Substation



Appendix E – Building Inspection Reports

Fire Protection:

- Year Built:
 - 1927–1932 — Original building fire protection systems.
- Fire Protection System Description:
 - Fire suppression for this building consists of standpipe risers and fire hose cabinets. There is no sprinkler system for this building.
- Overall building fire protection system condition:
 - Building has hand held ABC fire extinguishers that have been tagged and inspected on a regular schedule.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are major capital requirements involved at this time - lack of sprinkler system. Building does not meet current codes and standards. Automatic fire protection system with flow and tamper alarms is required for all buildings.



Substation USS-12



Substation USS-3



ATS for Emergency Generator



Emergency Generator



Fire Alarm Strob and Smoke Detector in Elevator Lobby



Fire Alarm Manual Pull Station



Exit Sign and Fire Alarm Strobe



Fire Alarm Speaker and Strobe



Fire Alarm Strobe and Speaker



Smoke Detectors in Elevator Lobby



Fire Alarm System Junction Box



Smoke Detector



Fire Alarm Panel



SquareD Branch Panel



Panel LC #83A Should be Replaced



Fire Alarm Control Panels



Appendix E – Building Inspection Reports



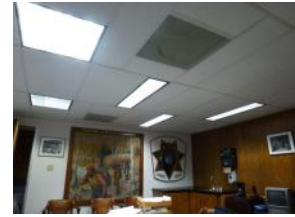
Branch Circuit Panel LC/88



Steam Piping Over Electrical Gear



Condensate and Steam Piping Over
Electrical Gear



Fluorescent Lighting



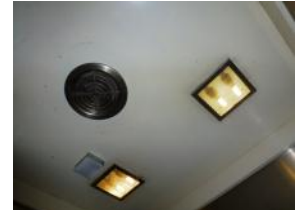
Decorative Lighting and Exit Sign



Fluorescent Light in Basement



Light Fixture In Jury Room Restroom



Recessed Light Fixtures



Pendant Mount Fixture



Office Lighting and Security Camera



Fluorescent Lighting in Toilet Room



Corridor Lighting



Elevator Equipment Room



Decorative Lighting



Corridor Light Fixture with Wire Splice



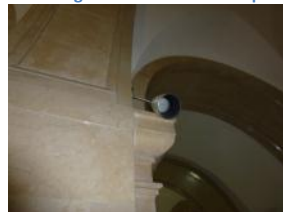
Incandescent Courtroom Lighting



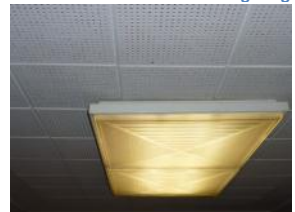
Courtroom Lighting



Security Camera, Exit Sign and Lighting



Incandescent Flood Lighting



Office Lighting



Broken Fluorescent Light Bulb



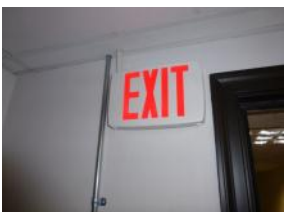
Panel EDP



Microphone Wiring in Courtroom



Basement Light Switches and Receptacles



Exit Signs



Exit Sign



Data Cabling



Corroded Ceiling Mounted Junction
Box and Conduit



Appendix E – Building Inspection Reports



Wires Hanging From Ceiling



Cold water piping



Plumbing chase



Domestic water heater



Floor mounted urinals



Lavatories



Water closet with flush valve



Wall mounted fire extinguisher



Fire hose cabinet with fire extinguisher

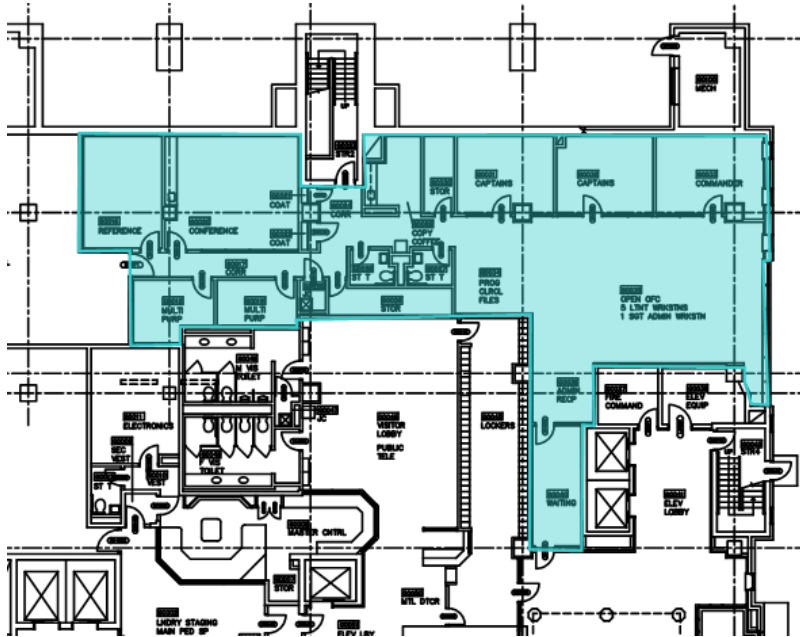


Appendix E – Building Inspection Reports

Criminal Justice – Courthouse Complex (ID: 76) – 949 North 9th Street

EUA Architects

- Suite L01 Administrative Offices (color coded blue) appears to be under renovation and is largely unoccupied except for a receptionist and 2 enclosed offices.



- It is apparent that general maintenance of equipment and certain finishes have not been routinely replaced or upgraded since the building was built. In talking with maintenance staff there is no running list or check-off of maintenance items that they track for record purposes. Maintenance seems to be reactive instead of proactive.
- Ceiling tiles have been routinely replaced due to leaking valves, dripping pipes, etc. due to lack of maintenance. There is an abundance of ceiling tile stored in the basement for this purpose.
- Exterior precast panel joints require tuck-pointing and sealant. The sealant used at the time of construction in 1992 is approaching its expected life and is very important to maintain since this is the only barrier at the joint to keep the building weather tight.



Floors, walls in public areas in good condition



Administrative office area under renovation



Typical corridor in lower level: floors & walls worn, old equipment stored in hallways



Some cracks in penthouse precast panels near shelf angles



Roof, flashing generally in good condition, coping joints require tuck-pointing, sealant



Loading dock doors in poor condition



Appendix E – Building Inspection Reports

- There are slight cracks in precast panels near shelf angles in penthouse and this should be referenced in the Façade Study completed by others.
- The joints in parapet coping caps should also be tuck-pointed and sealed.
- Maintenance staff has expressed concern that the elevators need frequent maintenance.
- Built up roof is generally in good condition, however, staff has expressed concern that the roof needs replacement. Visual inspection from our team did not support replacement, however periodic inspection and maintenance is required.
- The finish materials (stone, marble, wood cladding) in public entrance space & hallways are in good condition and have held up well to public abuse.
- The revolving main entrance door is not working and should be replaced with an automated swinging style storefront or sliding mall front retail type.
- The loading dock doors are deteriorating and are in need of replacement. Also there is no separation in the loading dock area to prevent cold air from rushing into the building for the times doors are in use. This wastes energy and causes undue strain on mechanical systems and other building elements.



Appendix E – Building Inspection Reports

Singh Associates

- Year Built:
 - 1992 — Original building mechanical systems.

Mechanical System Description:

- Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam piping, condensate return piping, and associated valving, and accessories provides heat to building air handling units. Steam to hot water heat exchangers provide hot water for domestic hot water heating, perimeter heating, variable air volume box reheat coils and constant air volume zone reheat coils.
- Ventilation — Multiple air handling systems provide supply, return, and exhaust ventilation throughout the building.
- Air-conditioning — Two chillers located at the building ground level with roof mounted cooling tower provide chilled water for the building air handling units. Computer data room is provided with dedicated precision control computer room Liebert unit.
- Humidification — Some of the building air handling units are provided with humidification control.
- Heat recovery — Run around coil loops are provided in the air handling units serving inmate pod areas to recover heat from exhausted air.
- Variable frequency drives — variable air volume air handling systems supply and return fans and chilled water distribution pumps have variable frequency drives.
- Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)



Steam to hot water heat exchangers



Air handling unit steam coil



Steam and chilled water piping



Steam suspended unit heater



Pneumatic steam control valve



Air handling unit



Inline exhaust fan



Appendix E – Building Inspection Reports

- Heat exchangers — 20 years (100%)
- Heat recovery — 15 years (100%)
- Piping/equipment insulation — 15 years (75-100%)
- Water chillers — 20 years (100%)
- Cooling Towers — 15-20 years (100%)
- Freeze protection — 15 years (100%)
- HVAC piping & fittings — 20 years (40%)
- HVAC valves — 15 years (50%)
- Indoor air handling units — 20 years (100%)
- Exhaust fans — 20 years (100%)
- Finned tube elements — 35 years (100%)
- Duct mounted coils — 20 years (100%)
- Air compressors — 25 years (100%)
- Operational issues:
 - Heating — hot water pumps may need replacement soon.
 - Ventilation — broken duct mounted control dampers.
 - Air-conditioning — chilled water/cooling tower water pumps may need replacement soon.
- Major capital requirements:
 - Heating— establish time schedule and appropriate funds for gradual replacement of heating equipment.
 - Ventilation — establish time schedule and appropriate funds for gradual replacement of ventilation equipment.
 - Air conditioning — establish time schedule and appropriate funds for gradual replacement of air conditioning equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- The building was built in 1992. The elevators were recently replaced about 5 years ago.
- There are cooling and electrical upgrades taking place in the data rooms.
- There are two electrical feeds to the facility and the backup generator. The generator is 1500 kVA and is original to the building. The generator is tested monthly.



Centrifugal return fan



Centrifugal exhaust fans



Air handling unit (mezzanine)



Centrifugal return fan and VFD drive (mezzanine)



Chilled water chiller pump



Centrifugal water cooled chiller



Cooling tower water pump



Appendix E – Building Inspection Reports

- The existing electrical switchboards, panels and motor control centers are all original to the building, so about 20 years old. They are all in good condition. Currently the facility is at 40% of the electrical capacity.
- The existing PA system is not working, but will be replaced as part of the data upgrades.
- The fire alarm system, by Honeywell, is 20 years old and is in good condition. The engineer stated that the courthouse system was recently replaced and is now newer than the criminal justice facility fire alarm system. It is recommended to replace the criminal justice fire alarm system for better coordination with the courthouse system. It is estimated that the fire alarm system has about 5 to 10 years of life left. It is recommended that the system be replaced. The cost to replace this system is roughly \$3/sf.
- FA System conduit and junction boxes should be painted red to distinguish between fire alarm components and general wiring.
- The wiring for three of the AHU Honeywell units NCP-11, 12 and 13 used to be connected to a UPS, but are now just plugged into a receptacle instead of being directly wired.
- Security system is currently being replaced with new cameras and controls. Courtroom lighting was upgraded to T-8's. The rooms are very bright. Recommend installing dimmers.

Plumbing:

- Year Built and Major Renovations:
 - 1992 — Original building plumbing systems.
- Plumbing System Description:
 - The domestic water service enters the basement into the mechanical room. A water meter is provided.
 - The system consists of 4 steam to water heat exchangers/converters with circulating pumps. There is no storage tank for domestic hot water heater for the dishwasher. The recirculating pumps appear to be in good condition.
 - Domestic water piping in the building appears to be copper with soldered joints. Generally, the piping appeared to be in good condition for its age with no observed leaks.



Air handling unit chilled water coil



Hot water pumps



AHU condensate return piping



Duct mounted control damper



Heat recovery loop pump



Heat recovery run around coil loop
(outdoor air side)



Heat recovery run around coil loop
(exhaust air side)



Appendix E – Building Inspection Reports

- Soil, waste and vent piping are cast iron. Most cast iron piping that could be observed appeared to be in good condition for its age with no apparent leaks. The existing sanitary piping collects and extends to the east to the public sewer.
- The gas service enters the east side of the building with the meter located inside the main building entry stairs and is then extended to the mechanical room. All piping is black steel with welded and threaded joints. The gas piping appears to be in good condition.
- Overall building plumbing system condition:
 - A new reduced pressure type backflow preventer should be provided on the building water service to protect the public water main.
 - The majority of plumbing fixtures and related trim in the building appear to be in fair to poor condition and are in general need of partial replacement.
 - Existing water booster pump shall be replaced with new one including control panel with new sequence of operation based on demand.
 - The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
- Operational issues:
 - Existing plumbing fixtures cause energy loss year round.
 - Older plumbing system may not support the pressure and waste removal requirements of modern functions.
- Major Capital Requirements:
 - The recommended upgrades include new vertical hot water storage tank as needed pending availability of space.
 - Some of the domestic water piping may be able to be reused, along with some of the drain piping. Drains should be rodded out and new plumbing fixtures provided to respond to the proposed plan.
- Safety:
 - From a safety and efficiency perspective, these plumbing systems should be upgraded or changes performed in a thoughtful manner that provides required functionality.



Computer data room unit



New air compressor (roof penthouse)



Air compressor



Air compressor



Honeywell control panel



Sensor wiring is not in conduit



Hot water storage tank missing



Appendix E – Building Inspection Reports

■ Summary:

- All gas, water, sanitary and storm plumbing systems are currently adequate to serve the building as well as the proposed new plumbing fixtures located in renovated area.
- Proposed new water booster pump with control package and new vertical storage tank(s) shall be provided.



Existing water booster pump

Fire Protection:

■ Year Built and Major Renovations:

- 1992 — Original building fire protection systems.

■ Fire Protection System Description:

- No major deficiencies were noted in the fire protection system. Fire pump and piping system located at the basement level. The 100 horse power electric motor and fire pump and the small air compressor and 2 HP jockey pump appear to be in good condition.



Performance of better maintenance needed

■ Overall building fire protection system condition:

- The complete fire suppression sprinkler system has 8" size water service with individual control box outside the building.



Maintenance service is required

■ Operational issues:

- The system was observed in a visual review only.

■ Major Capital Requirements:

- There are no major capital requirements involved at this time. Corrosion monitoring system can provide early warning of corrosion problems that can do irreparable harm to the fire protection system if left unchecked.



Routine in-house maintenance

■ Safety:

- The building is bounded by fire rated doors, dampers and penetration seals.

■ Summary:

- Sprinklers are highly desirable for life safety and property protection. Existing automatic fire suppression system is in good condition and require proper maintenance.



Appendix E – Building Inspection Reports

Safety Building – Courthouse Complex (ID: 30) – 821 West State Street

EUA Architects

- Unoccupied former jail space occupies a significant amount of square footage on each floor. Some of this space is in poor condition. A portion on the third floor is scheduled to be renovated into office space, but the majority is unused.
- The unoccupied jail blocks have flooded before from toilets backing up in the building.
- The main public entrance is not handicap accessible. The skywalk from the courthouse is the closest accessible path.
- The building has window AC units on the second and fourth floors.
- Some offices have been recently remodeled, others have carpet and finishes that are nearing the end of their useful life.
- Most windows have been replaced, some are aging.
- The gymnasium roof is damaged and in poor condition.



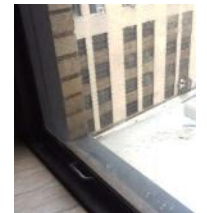
Unoccupied former jail space. Walls and windows are damaged, some space used for storage



Typical room within the former jail block



Recently remodeled office space. Worn, stained carpet and outdated lighting in some of the other offices.



Some wood frame, single pane glass windows still in the building



Gymnasium roof in poor condition



Courtroom, furniture in good condition



Public restrooms not fully HC accessible, are in fair condition



Typical corridor. Floor, walls, and ceiling generally in good condition, wear and tear evident in some areas



Corridor used as storage space



Roof penthouse exterior is in poor condition. Damaged windows, loose flashing, and large cracks in the brick wall



Visible staining on stone cladding from windows, retention wall dirty. Window AC units on the 2nd & 4th floors



Appendix E – Building Inspection Reports

Singh Inspections

Mechanical:

- Year Built:
 - 1927–1932 — Original building mechanical systems.
 - 1990 — Air cooled condensing units/cooling coils installation (penthouse AHU).
 - 1993 — Pistol range ventilation system renovation.
 - 1996 — Self-contained air conditioning unit installation (serving Communications Center).
 - 2001 — Centrifugal water chiller replacement (333 tons).
 - Air cooled chiller installation (McQuay)
 - Cooling tower installation.
- Mechanical System Description:
 - Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam supply/condensate return piping, condensate return pumps, and associated valving, accessories, and controls provides heat to building hot water and domestic hot water heat exchangers, perimeter steam radiators, terminal unit heaters, and original built-up air handling unit steam heating coils. Hot water system consisting of steam to hot water heat exchangers, hot water pumps, hydronic accessories, valving, piping and controls provides hot water to modular air handling unit heating coils, finned tube radiation, and various heating terminal units (cabinet unit heaters, suspended unit heaters, convectors). Two steam to hot water heat exchangers provide domestic hot water. Incoming steam service.
 - Ventilation — Multiple dual duct air handling systems and constant air volume air handling systems complete with wall louvers, supply/return/exhaust ductwork, dual duct mixing boxes, supply/return/exhaust inlets/outlets, separate return/relief fans, and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — Water chiller with cooling tower generates chilled water. Chilled water system consisting of



Built-up AHU heating/cooling coil sections



Hot water pump



Self contained AHU



Steam to heating HW heat exchangers



Steam to domestic HW heat exchanger



Condensate return pump



Steam to domestic HW heat exchanger



Appendix E – Building Inspection Reports

two chilled water pumps with chilled water supply/return piping, hydronic accessories, valving, and controls distribute chilled water to some of the building air handling units. Air cooled condensing units complete with DX cooling coils provide cooling capabilities for the remaining air handling units.

- Humidification — Some of the building air handling units are provided with humidification control.
 - Kitchen exhaust — existing, too big for residential range oven currently serving.
 - Variable frequency drives — variable air volume air handling systems supply and return fans have variable frequency drives.
 - Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
- Most of the HVAC systems are at the end of their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Chillers — 20 years (100%)
 - Cooling towers — 20 years (100%)
 - Air cooled condensing units — 15 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Duct mounted coils — 20 years (100%)
 - Air compressors — 25 years (100%)
- Operational issues
- Major capital requirements:
 - Heating— establish time schedule and appropriate funds for gradual replacement of outdated heating system and equipment.



Modular AHU cooling coil



Thermostat



Steam radiator



Built-up air handling unit



Built-up air handling unit



Modular air handling unit



Separate return fan



Appendix E – Building Inspection Reports

- Ventilation — establish time schedule and appropriate funds for gradual replacement of outdated ventilation system and equipment.
 - Air conditioning — establish time schedule and appropriate funds for gradual replacement of outdated air conditioning system and equipment.
- Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- Existing 13kV electrical service equipment is approximately 47 years old per the 1965 record drawings. The system consists of several 13kV double-ended substations (USS-9, USS-10, USS-11) with tie breakers. The two 13kV service feeds come from the Courthouse S&C switchgear which is fed from the local WE Energies power plant. Given the age of the system, it is approaching or beyond its life expectancy and should be upgraded in the next 5 years. Per 1987 as-built drawings, substations USS-7 and USS-8 also exist and are located in the basement. This was not verified in the field.
- The existing emergency service is provided by an on-site 205kW generator. The generator is original to the building per the building engineer. The generator is located in the basement in Room G-80A. The building engineer stated that there is another generator on the site, but that it isn't working. Location and condition were not observed. Per 1987 as-built drawings, a new



Modular air handling unit with variable frequency drive



Return fan variable frequency drive



Inline fan



Separate return fan



Transfer air wall propeller fan



Oversized kitchen exhaust hood



Gym air handling unit



Appendix E – Building Inspection Reports

150kW diesel generator was installed. Also per the as-built drawings, there was an existing 50kW generator that was called to remain as is. Therefore it is possible that the 205kW generator was installed in 1987 and the generator that is not working is original to the building.

- Verizon has antennas and a small building located on the roof. Cables coming from the building to the antennas are contained in a stainless steel enclosure.
- There is an existing motor control section located in one of the mechanical penthouses on the roof that has an old fluid storage tank mounted above it. Recommend removal of the tank if it is no longer in use. Otherwise, install a drain pan below the tank to keep fluid off the motor control equipment if there is a leak.
- The existing fire alarm system is by Honeywell. The system underwent maintenance upgrades in 2007 per C023-06432 as-built drawings dated April 2007. Per the 2007 as-built drawings, all of the existing fire alarm initiating devices and control modules were to be replaced with new addressable devices. The system is connected to the Courthouse and the Criminal Justice Facility.
- Lighting controls on the 6th floor, especially in office 604, are original to the building. The building engineer stated that they are very old, most of the tenants don't know how to use them and they can be annoying to use. Light switches appear to be original to the building and should be replaced when lighting is replaced.
- There is a wide range of light fixture types installed. Many are mostly likely original to the building. There are recessed downlights that look to be original. The majority of these fixtures had the incandescent lamps replaced with compact fluorescents. Some of the building has fluorescent fixtures with T-12 lamps and some of the building has fluorescents with T-8 lamps. The engineer stated that they have replaced the majority of the fixtures, but will replace the remaining T-12 fixtures as they fail. Recommend replacement of all building lighting in the next 5 to 10 years.
- Several of the branch power panels are original to the building and should be replaced when the main substations are replaced. Panel LDP/SB has some wiring that was spliced into the panel and is hanging outside of the panel. The wiring should be re-installed.
- Security cameras appear to be in good shape except for the cameras located in the basement. Recommend replacing these cameras.
- Observed a wet type sprinkler head in the newly remodeled data room next to Room B-10. Recommend verification of type and possible replacement to system more compatible with data equipment.
- Building engineer indicated that the 6th floor courtroom has a bad sound system, which is in the process of being upgraded.



Temperature control air compressor



Air purification unit



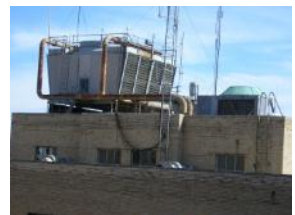
Dual duct mixing box



Wall louver



Air cooled condensing unit



Cooling tower



Air cooled condensing units



Appendix E – Building Inspection Reports

- Rooms in 308 were renovated approximately 10 years ago.
- There is a future project to re-run the data cabling throughout the building.

Plumbing:

- Year Built:
 - 1927–1932 — Original building plumbing systems.
- Plumbing System Description:
 - Two mains provide water to the building. The 6" domestic water service enters the building in the north west corner of the old pistol range and 4" main which enters the north side of the building into the utility service room. Domestic water booster pumps located in the basement mechanical room boost the city water pressure for building.
 - Two 10" steam mains serve this building, one exits from the northeast corner of the building, the other exits from the south east end of the building. The system consists of steam to water heat exchangers/converters with circulating pumps. Domestic hot water is generated using tube in shell heat exchangers with associated hot water storage tanks.
 - Domestic water piping in the building appears to be copper with soldered joints. Generally, the piping appeared to be old and in fair condition for its age with no observed leaks. There could be blockages or restrictions in flow due to the buildup of deposits on the inside walls of the piping.
 - Soil, waste and vent piping consists of cast iron piping. Most cast iron piping that could be observed appeared to be in fair condition for its age with no apparent leaks. The existing sanitary piping collects and extends to the public sewer.
 - The 2" gas service enters the northwest corner of the building, at the basement level. All piping is black steel with welded and threaded joints. The gas piping appears to be in good condition.
- Overall building plumbing system condition:
 - A new reduced pressure type backflow preventer should be provided on the building water service to protect the public water main.



Chilled water pump



Temperature control refrigerated air dryer



Window air conditioner



Centrifugal water chiller



Condenser water pump



Pneumatic damper actuator



AHU humidifier section



Appendix E – Building Inspection Reports

- The majority of plumbing fixtures and related trim in the building appears to be in fair to poor condition and in general need of partial replacement.
- Existing water booster pump shall be replaced with new including control panel with new sequence of operation based on demand.
- The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
- Operational issues:
 - Existing plumbing fixtures cause energy loss year round.
 - Older plumbing system may not support the pressure and waste removal requirements of modern functions. When the piping system no longer serves the building's demands, or there are multiple failures, then the system should be considered for replacement. For a localized failure, simply replace the section that failed.
- Major Capital Requirements:
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.
 - Some of the domestic water piping may be able to be reused, along with some of the drain piping. Drains should be rodded out and new plumbing fixtures provided to respond to the proposed plan.
- Safety:
 - From a safety and efficiency perspective, these plumbing systems should be upgraded or changes performed in a thoughtful manner that provides required functionality.
- Summary:
 - All gas, water, sanitary and storm plumbing systems are currently adequate to serve the building as well as the proposed new plumbing fixtures located in renovated area.
 - Proposed new water booster pump with control package and new vertical storage tank(s) shall be provided.

Fire Protection:

- Year Built:
 - 1927–1932 — Original building fire protection systems.
- Fire Protection System Description:



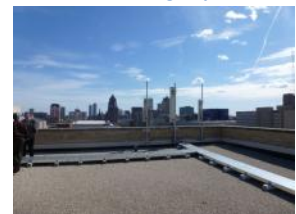
Temperature control air compressor



205kW Generator Nameplate



205kW Emergency Generator



Verizon Antennas and Cabling System



Verizon Building



Disconnect Switches on Mechanical Penthouse



Recessed Fluorescent Fixture and Fire Alarm Strobe and Speaker



Appendix E – Building Inspection Reports

- Fire suppression for this building consists of standpipe risers and fire hose cabinets. Except for the kitchen area, some common areas and offices and prisons, building is not fully sprinklered.
- Overall building fire protection system condition:
 - Building has hand held ABC fire extinguishers that have been tagged and inspected on a regular schedule.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are major capital requirements involved at this time - lack of sprinkler system. Building does not meet current codes and standards. Automatic fire protection system with flow and tamper alarms is required for all building.
 - Some areas are sprinklered and would increase safety and decrease property damage potential.



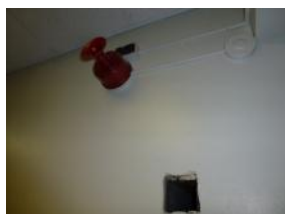
Fire Alarm Pull Station



Fire Alarm Strobe



Exit Sign and Fire Alarm Speaker and Strobe



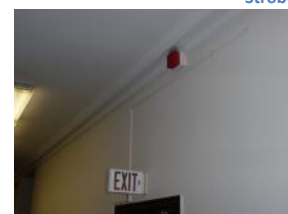
Fire Alarm Horn in Basement



Fire Alarm Pull Station and Exit Sign



Fire Alarm Device



Exit Sign and Fire Alarm Horn/Strobe



Fourth Floor Fire alarm Devices and Lighting



Fire Alarm and Exit Sign in Gymnasium



Wet Sprinkler Head in Data Room



Pull Station and Exit Sign



6th Floor Lighting Controls



6th Floor Office Light Switch



Wall Plate Not Installed Properly



Lighting on 6th Floor Has T-12 Lamps and T-8 Lamps



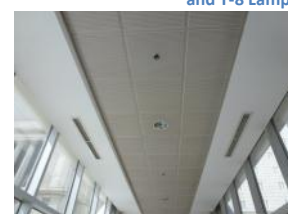
Courtroom Lighting



Recessed Fluorescent Lighting



Incandescent Fixture Replaced with Compact Fluorescent Lamp



Third Floor Recessed Downlighting



Appendix E – Building Inspection Reports



Security Camera and Lighting



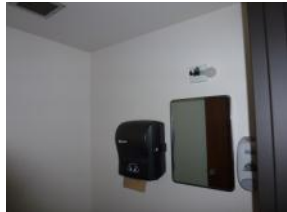
Corridor Lighting



Lighting in Cell Area



Office Lighting



Incandescent Bathroom Light Fixture



Gymnasium Lighting



Panel in Closet MU6-2



Panel LDP/68 Located on the 6th Floor



Original Branch Pan



Panel in Sheriff's Office Need Replacing



Third Floor Branch Circuit Panel



Branch Circuit Panel



Panel EP/1



Panel LDP/SB with Improper Splicing



Panel BE/G is Missing Internal Cover



Substation USS-10



Substation USS-9



Substation USS-11



Security Camera



Security Camera



Security Camera in Basement



Security Camera



Speaker



Closet MU6-8 Converted to Network Closet



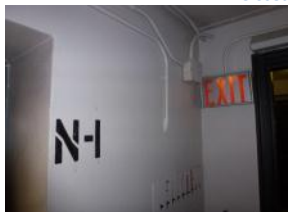
FACP by Room G-80B



MCC Section with Tank Above



ADA Chair Lift Not in Service



Exit Sign and Cell Area



Appendix E – Building Inspection Reports



Exit Sign



Cell Door Status Panel



Wire mold and Box



Basement Branch Circuit Panel Missing Cover



Flood Lights in Courtyard Area



Smoke Detector Near Elevators



Exit Sign and Smoke Detector



Third Floor Exit Sign



Cell Door Status Panel



Recessed Fluorescent Lighting



Incoming cold water service



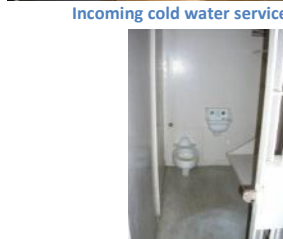
Plumbing piping



Plumbing chase



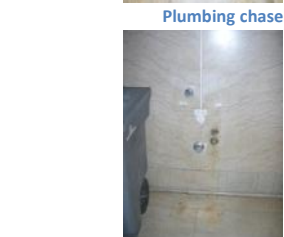
Wall mounted drinking fountain



Jail cell: lavatory & hand sink



Floor mounted drinking fountain



Missing drinking fountain



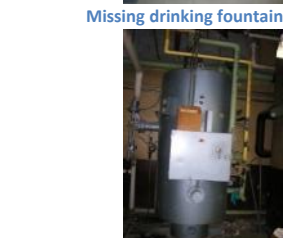
Wall - hung lavatory and sink



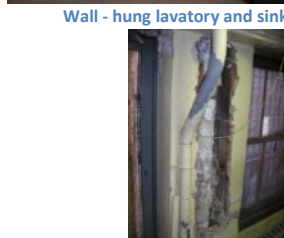
Mount kitchen sinks stainless steel



Prison: lavatories and shower



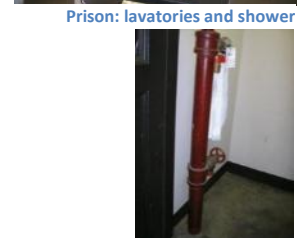
Steam to domestic hot water heat exch.



Asbestos pipe removal



Partial fire suppression system



Standpipe riser with fire hose



Fire sprinkler (concealed type)



Upright sprinkler head with piping



Fire sprinklers (ceiling mounted)



Fire hose cabinet



Appendix E – Building Inspection Reports

Community Correctional Center (ID: 35) – 1004 North 10th Street EUA Architects

- The building is not occupied. Equipment and furniture are still stored there from its former use.
- The main entry is boarded up, along with some of the exterior windows. Windows are covered with metal screens that have begun to rust. Some of the windows are wood frame with single pane glass.
- Overall, the interior is in poor condition. Carpets, ceiling tile, and paint are all beyond their useful life.
- The exterior concrete stairs are deteriorated. As the concrete continues to crack away, the railing connections may come loose.
- The roof has needed multiple repairs and leaks in various spots



Metal screens over windows rusting, other windows boarded up. Brickwork, window sills stained



Janitors closet, deteriorated floor and wall



Ceiling tiles sagging, carpet worn & in poor condition



Main entry boarded up, vestibule used for storage. Ceiling and carpet are in poor condition



Paint peeling, floor tile in poor condition



Floor, ceiling, and walls deteriorated



Concrete exterior stairs deteriorated, railings potentially unstable



Broken ceiling tile, debris on the floor



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1930 — Original building mechanical systems.
 - 1989 — First floor renovation. Partial renovation of rest of the building.
 - Currently building is abandoned and most of the HVAC systems are not operational.
- Mechanical System Description:
 - Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam piping, condensate return piping, and associated valving, accessories and controls provide heat to building's various terminal heating units (convectors, cast iron radiators, cabinet unit heaters, finned tube radiation, suspended unit heaters). Steam condensate return is utilized for domestic water (pre)heating before it is discharged to the sanitary sewer. First floor Administrative Area air handling unit steam heating coils are served by the adjacent Medical Examiner building steam heating system (air handling unit is located in Medical Examiner building basement mechanical room). First floor Administrative Area air handling system zone reheat coils are served with hot water by the Medical Examiner building heating system. Packaged gas fired rooftop unit serves the kitchen. Electric heating only fan coil units provide heating in some of the offices. Ceiling mounted electric radiant panels serve the showers and drying rooms.
 - Ventilation — Central station air handling unit (15 HP supply fan electric motor) with separate return fan (3.0 HP), complete with intake wall louvers, relief hoods, supply/return/exhaust ductwork, supply/return/exhaust inlets/outlets, and dedicated exhaust fans provide supply, return, and exhaust ventilation for the building first floor Administrative Area. Fan coil units provide ventilation in some of the offices. The remaining building is ventilated by means of natural ventilation via operable windows.



Finned tube radiation



Convactor



Convactor



Finned tube radiation



Condensate return to domestic hot water heat exchanger



Kitchen exhaust hood



Existing Recessed Fluorescent Lighting



Appendix E – Building Inspection Reports

- Air-conditioning — Chilled water is provided by the adjacent Medical Examiner building 225 ton water chiller/cooling tower. Medical Examiner building chilled water system distributes chilled water to first floor Administrative Area air handling unit cooling coils. Packaged DX cooling rooftop unit serves the kitchen. Window air conditioners provide cooling for individual offices on each floor.
- Humidification — First floor Administrative Area air handling unit is provided with steam humidifier.
- Kitchen exhaust — Kitchen exhaust hood is provided in the kitchen.
- Building automation system — Building temperature control system is a combination of pneumatic controls and electro-mechanical controls. Pneumatic control system serves both the Medical Examiner building and Community Correctional Center.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - Heat exchangers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating coils — 20 years (100%)
- Operational issues:
 - Currently building is abandoned and most of the HVAC systems are not operational.
 - Building is considered for demolition.
- Major capital requirements (if building is not demolished):
 - Heating — establish time schedule and appropriate funds for replacement of the entire heating system and equipment.
 - Ventilation — establish time schedule and appropriate funds for replacement of the entire ventilation system and equipment.



Fluorescent Lighting in Toilet Room



Surface Mounted Fluorescent Lights



Janitor's Closet with Incandescent Lamp



Inoperative Emergency Generator



Fire Alarm Strobe, Speaker and Manual Pull Station



Fire Alarm Strobe and Speaker



Fire Alarm Panel



Appendix E – Building Inspection Reports

- Air conditioning — establish time schedule and appropriate funds for replacement of the entire air conditioning system and equipment.
- Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- Per the building engineer, the building was built in the 1930's. The building was "winterized" in 2008. The electrical equipment and switchboard are original to the building per the building engineer.
- The existing lighting consists of surface and recessed mounted fluorescent fixtures with T-12 lamps and with incandescent light fixtures. These fixtures were installed 20 years ago per the 1992 as-built drawings.
- The existing emergency generator is not functioning and has been abandoned. Unable to verify nameplate ratings.
- The original Johnson Controls fire alarm system was replaced with a Honeywell system at some point. Unable to verify date with engineer or as-built drawings.
- Branch panels throughout the building appear to be original.
- Existing security cameras appear to be in fair shape. As-built drawings show that cameras were installed in 1989.
- Exit signs are approximately 20-25 years old.
- All of the above systems should be replaced if the building comes out of "winterized" mode.

Plumbing:

- Year Built:
 - 1930 — Original building plumbing systems.
- Plumbing System Description:
 - The 4 " domestic water service enters the west side of the building adjacent to the emergency generator room. There is no protection by a backflow prevention valve.
 - The 6" steam main serves this building and enters the basement at the North 10th Street side of the maintenance room. The system consists of two steam to water heat exchangers/converters with circulating pumps. Domestic hot water is generated using tube in shell heat exchangers with associated two 200 gallon hot water storage tanks.



Smoke Detector and Disconnected Wires



Johnson Controls Fire Alarm Control Panel



Panels PNL-1/N and PNL-1NXA



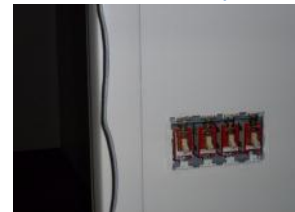
Exit Signs



Wiring



Security Camera



Light Switches Missing Coverplate



Appendix E – Building Inspection Reports

- Domestic water piping in the building appears to be a mix of black steel, galvanized and copper piping. Generally, the piping appeared to be old and in fair condition for its age with observed leaks. Due to the age of the building, asbestos material is contained throughout the piping for plumbing and heating systems.
- The 3" gas service enters at the basement level of the building. All piping is black steel with distribution to kitchen cooking equipment, two rooftop packaged units and emergency generator in the basement.
- Overall building plumbing system condition:
 - The plumbing systems of the building are potentially critical and do not meet current code requirements. All plumbing systems shall be demolished and replaced by new system.

Fire Protection:

- Year Built:
 - 1930 — Original building fire protection systems.
- Fire Protection System Description:
 - Fire suppression for this building consists of standpipe risers and fire hose cabinets. The building is not sprinklered.
- Overall building fire protection system condition:
 - A Siamese fire hose connection is located at the south side of the building. An Ansul fire suppression system is provided for the kitchen exhaust hood.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are major capital requirements involved at this time - lack of sprinkler system. Building does not meet current codes and standards. Automatic fire protection system with flow and tamper alarms is required for the new building



Junction Box with Exposed Wires



Incoming cold water service



Asbestos piping insulation



Sanitary & vent piping



Indoor grease trap



Domestic storage tanks



Kitchen area



Lavatory in abandoned area



Appendix E – Building Inspection Reports

Medical Examiner (ID: 37) – 1004 10th Street

EUA Architects

- The roof over the loading dock area leaks and has caused damage to the concrete, painted surfaces, and entry door.
- The loading dock area is dirty and in poor condition. Large pieces of concrete have cracked off of the stairs, and the entry door to the basement level is rusted and beyond its useful life. Water has leaked from the roof above (now repaired), causing damage to the walls, door, and driveway slab.
- The basement had suffered some water damage from a roof leak (now repaired) during a 100 year rain/flood event. Medical equipment and archived files are stored in the basement near floor level.
- Office and medical equipment is stored in the basement hallways, along with used fluorescent lamps, a few of them broken on the floor.
- Many ceiling tiles are in poor condition, either stained from water damage or dirty.



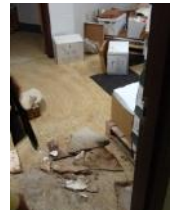
Loading dock stairs are cracked, large pieces have broken off. Not safe to use



Loading dock area is filled with trash, water damage to concrete in many spots



Loading dock entrance door to the basement. Extensive water damage to the floor slab, wall, and door



Basement storage room with broken ceiling tile, file storage



A typical basement corridor



Broken fluorescent lamps found in a few places in the basement mechanical rooms and hallways



Old office furniture and medical equipment stored in the basement corridors



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1973 — Original building mechanical systems.
 - AHU-2 replacement.
 - Chiller/cooling tower replacement.
- Mechanical System Description:
 - Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam piping, condensate return piping, condensate return pumps, and associated valving, and accessories provides heat for building three (3) air handling unit steam heating coils. Steam to hot water heat exchangers provide hot water for zone reheat coils, snow melting system, and various terminal heating units (convectors, cabinet unit heaters, finned tube radiation, suspended unit heaters). Steam to domestic hot water heat exchanger/tank provides domestic hot water for the building.
 - Ventilation — Three (3) central station air handling units (5, 15 and 20 HP supply fan electric motors) with separate return fans (3.0 HP), complete with intake wall louvers, relief hoods, supply/return/exhaust ductwork, supply/return/ exhaust inlets/outlets, and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building. Air handling unit systems are provided with VFDs. Two of the units provide 100% outdoor air. Labs are provided with fume hood and local exhaust. Emergency generator room is provided with make-up air and exhaust ventilation.
 - Air-conditioning — 225 tons indoor water chiller and grade mounted cooling tower complete with associated pumps, hydronic accessories, piping, valving, and controls generate chilled water to serve the building. Chilled water system consisting of chilled water pump, chilled water supply/return piping, hydronic accessories, valving, and controls distribute chilled water to building air handling unit cooling coils.



Finned tube radiation



Thermostat



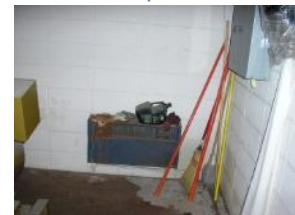
Convector



Zone reheat coil



Suspended unit heater



Convector



Cabinet unit heater



Appendix E – Building Inspection Reports

- Humidification — Building air handling units are provided with humidification control.
- Building automation system — Building temperature control system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Chillers — 20 years (100%)
 - Cooling towers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating coils — 20 years (100%)
 - Air compressors — 25 years (100%)



Central station AHU steam heating coil and condensate return pump



Steam to domestic hot water heater/tank



Steam to heating HW heat exchanger



Lab local exhaust



Humidifier



Snow melting system



Lab fume hood



Appendix E – Building Inspection Reports

- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for replacement of outdated heating system and equipment.
 - Ventilation — establish time schedule and appropriate funds for replacement of outdated ventilation system and equipment.
 - Air conditioning — establish time schedule and appropriate funds for replacement of outdated air conditioning system and equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- Per the building engineer, the building was built in the 1970's. The electrical equipment and 2000Amp, 120/208V Westinghouse switchboard are original to the building per the building engineer. The WE Energies room is located inside the mechanical room MUB-1-A.
- The existing lighting consists of surface and recessed mounted fluorescent fixtures with T-8 lamps and with incandescent light fixtures. These fixtures were installed 20 years ago per the 1992 as-built drawings. Recommend upgrading the incandescent lighting to more energy efficient fixtures.
- The PA system works and was installed in 1988 per as-built drawings.
- The existing Chrysler emergency generator is 60kW. The generator is tested on the first Thursday of every month. The automatic transfer switch (ATS) is located in room MUB-2.
- The original Johnson Controls fire alarm system was replaced with a Honeywell system at some point. Unable to verify date with engineer or as-built drawings.
- Branch panels throughout the building appear to be original. The building engineer stated that the Westinghouse panels in the basement are original, but those panels on the upper floors may have been upgraded. Recommend replacement of existing branch panels older than 20 years.
- Existing security cameras appear to be in fair shape. As-built drawings show that cameras were installed in 1988.
- Exit signs are approximately 20-25 years old. Recommend replacement within the next 5 years.
- The existing card access system works with proximity cards and is in good condition.



Emergency generator make-up air/exhaust



Inline return fan



AHU supply fan section



AHU supply fan section



Outdoor air intake pneumatic control dampers



Temperature control air compressor



Central station air handling unit



Appendix E – Building Inspection Reports

Plumbing:

- Year Built:
 - 1974 — Original building plumbing systems.
- Plumbing System Description:
 - The domestic water service enters the basement mechanical room at the north east corner of the building with service from Highland Avenue.
 - An 8" steam main serves this building and enters the basement mechanical room from State Street. The system consists of multiple steam to water heat exchangers/converters with circulating pumps. Domestic hot water is generated using tube in shell heat exchangers with associated hot water storage tanks and pumps.
 - Water supply piping consists of copper. Generally, the piping appeared to be old and in fair condition for its age with no observed leaks. There could be blockages or restrictions in flow due to the buildup of deposits on the inside walls of the piping.
 - Soil, waste and vent piping consist of cast iron piping. Most cast iron piping that could be observed appeared to be in fair condition for its age with no apparent leaks.
 - All piping is black steel with welded and threaded joints. Natural gas is piped to the medical exam/autopsy area and to the 60 KW emergency generator located in the basement. The emergency generator utilized domestic cold water for cooling.
 - Compressed air is piped from the duplex control air compressor to the lab equipment.
- Overall building plumbing system condition:
 - The majority of plumbing fixtures and related trim in the building appears to be in fair to poor condition and in general need of partial replacement.
 - The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
- Operational issues:
 - Existing plumbing fixtures cause energy loss year round.
 - Older plumbing system may not support the pressure and waste removal requirements of modern functions.



Water chiller



Chilled/condenser water pumps



Cooling tower



Outdoor Lighting



Outdoor Light Fixture



Exterior Light Fixtures



Neon Lighting



Appendix E – Building Inspection Reports

- There is water damage at loading dock and leaking plumbing pipings. For a localized failure, simply replace the section that failed.
- Major Capital Requirements:
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.
- Safety:
 - From a safety and efficiency perspective, these plumbing systems should be upgrade or changes performed in a thoughtful manner that provides required functionality.
- Summary:
 - All gas, water, sanitary and storm plumbing systems are currently adequate to serve the building as well as the proposed new plumbing fixtures located in renovated area.

Fire Protection:

- Year Built:
 - 1974 — Original building fire protection systems.
- Fire Protection System Description:
 - Fire suppression for this building consists of standpipe risers and fire hose cabinets. The building is partially sprinklered in storage rooms and basement mechanical rooms.
- Overall building fire protection system condition:
 - Building has hand held ABC fire extinguishers that have been tagged and inspected on a regular schedule.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are major capital requirements involved at this time - lack of sprinkler system. Building does not meet current codes and standards. Automatic fire protection system with flow and tamper alarms is required for all building.



General Lighting



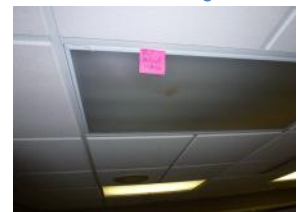
Recessed Light Fixture with Incandescent Lamp



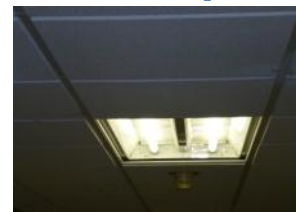
Recessed Fluorescent Lighting



Fluorescent Light Fixtures



Fluorescent Light Fixtures



Fluorescent Light Fixture



Dock Lighting



Exterior Lighting



Incandescent Light Fixture



60kW Emergency Generator



Appendix E – Building Inspection Reports



Generator ATS



Branch Circuit Panel



2000A Switchboard



Exit Sign



Fire Alarm Control Panel



Fire Alarm Strobe, Speaker and Pull Station



Fire Alarm Strobe, Speaker and Pull Station



Fire Alarm Pull Station



Johnson Controls Fire Alarm Panel



Smoke Detector Detached from Ceiling



Wall Plates with Connectors Removed



Security Camera



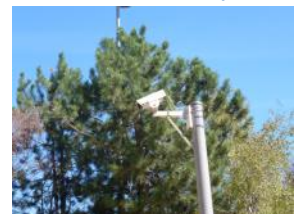
Exterior Light Pole



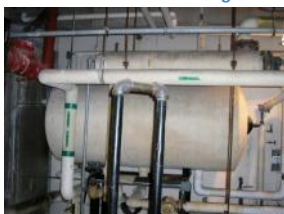
Speaker



Security Camera



Exterior Camera



Domestic hot water heater with storage tank



Drinking fountain



Hi – low drinking fountain



Lavatory



Plumbing check valve in damaged wall



Fire hose cabinet with fire extinguisher



Fire hose cabinet



Appendix E – Building Inspection Reports

McGovern Park Senior Center (ID: 1435) – 5400 North 51st Boulevard
EUA Architects

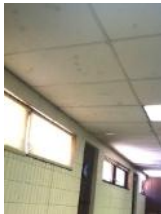
- Door hardware is not ADA compliant, exit doors are not equipped with panic hardware.
- Flooring, baseboard is nearing the end of its useful life.
- Ceiling tile is in poor condition, tiles in the pool room are damaged.
- The kitchen is at the end of its useful life, has water damage.
- A fence was recently added to keep people off the roof, windows in the back have been broken into before.



Exterior exit doors in poor condition, non-compliant hardware



Floor and baseboard near the end of their useful life



Ceiling tile at the end of its useful life. Tiles in the pool room are damaged and patched



Typical window, hardware broken



Downspouts in poor condition



Wood frame windows, single pane



Roof overhang wood worn, weathered. Some caulking is needed at joint to wall



Exterior wall patched, paint peeling in some areas



Paint peeling off the ceiling in stairwell/janitors closet area



Exterior stone stained in a few areas, generally in good condition



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1980 — Original building mechanical systems.
 - Chiller, pumps and portion of associated piping have been replaced.
 - Hot water boiler, pumps, and portion of associated piping have been replaced.
- Mechanical System Description:
 - Heating — Building is provided with two gas fired, sealed combustion hot water boilers, hot water pump, and associated piping, valving and hydronic accessories to generate and distribute hot water throughout the building. Floor and ceiling mounted unit vents, and one air handling unit (main hall) with hot water coils complete with associated ductwork, air outlets, and controls provide heat to the building. In addition, perimeter finned tube radiation and convectors serve as first stage of heating. Cabinet unit heaters are provided at entrances to offset heating load when exterior doors are frequently used.
 - Ventilation — Floor and ceiling mounted unit vents, and one air handling unit (main hall) complete with associated ductwork, air outlets, outdoor air intake louvers/hoods, return/exhaust fans, and controls provide supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — Air cooled, grade mounted chiller (30 ton, built 1996) and associated pumps, piping, and controls generate and distribute chilled water throughout the building. Floor and ceiling mounted unit vents, and one air handling unit (main hall) with cooling coils complete with associated ductwork, air outlets, and controls provide cooling to the building.
 - Paint booth is provided with exhaust ventilation.
 - Stained glass grinders — no local exhaust ventilation.
 - Kitchen range — no kitchen exhaust hood.
 - Building automation system — BAS system is a combination of pneumatic and electro-mechanical controls.



Hot water boilers



Hot water piping/pump



Hot water piping



Convectors



Convactor



Wall cabinet unit heater



Finned tube radiation



Appendix E – Building Inspection Reports

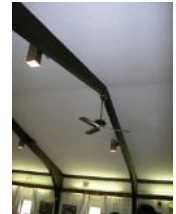
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Hot water boilers — 20 years (100%)
 - Chillers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating/cooling coils — 20 years (100%)
- Operational issues:
 - Heating
 - No major issues.
 - Ventilation
 - Kitchen range has no exhaust hood.
 - Paint booth is provided with exhaust ventilation
 - Stained glass grinders — no local exhaust ventilation.
 - Air conditioning
 - No major issues.
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for gradual replacement of heating equipment (unit vents, convectors, finned tube radiation).
 - Ventilation — establish time schedule and appropriate funds for gradual replacement of ventilation system and equipment.



Return air fan



Floor mounted unit vent (original to building)



Ceiling fans



Unit vents outdoor air intake louvers



Chilled water piping and pumps



Temperature control air compressor (new)



Chilled water piping (outdoor)



Appendix E – Building Inspection Reports

- Air conditioning — establish time schedule and appropriate funds for gradual replacement of air conditioning system and equipment.

Electrical:

- Building automation system — replace existing controls with new controls along with mechanical system replacement.
- Built Around: 1975
- Existing fire alarm (Johnson Controls and/or Simplex) system in fair condition.
- A couple of existing battery backed exit signs are with side mounted emergency lights look fairly new. Unable to confirm age of devices. Rest of the existing exit signs can be replaced with battery backed exit signs with side mounted emergency lights.
- No existing emergency generator.
- No emergency lighting system inside the building.
- Partial security lighting system around outside building wall, no security lighting at exit doors.
- Security camera system around the building in working condition however observation was that security camera system is not adequate to minimize vandalism due to lack of clarity.
- Security cameras are mounted on outside of the building and on light pole. Security camera system may need to be installed per NEC and state codes for outdoor installation.
- PA system is in place however may not be working adequately.
- Telephone and intercom. system is in working condition but not adequate around the building.
- Over all lighting system is in working condition, however more efficient and energy saving LED lighting may be needed. Especially hall room and where ambient day lighting is not available including bathrooms, lighting is not adequate.
- Motion sensor lighting control may need to be installed for all the bathrooms and utility rooms where possible to minimize power consumption.
- Main Distribution Panel is original dated 1975, 120/208V, 3-Phase 4-Wire, unable to confirm ampere rating.
- There are four sub-panels (A, B, C, and X) each 225Amp., 120/208V, 3-Phase, 4-Wire in working condition.
- No building lightning system found.



Air cooled chiller (built April 1996)



Paint booth



Roof insulation



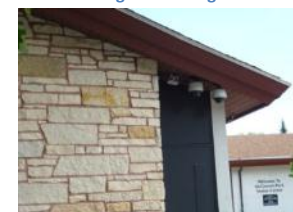
Kitchen range without exhaust hood



Existing Fire Alarm Control Panel



Existing Exterior Light Fixture



Existing Exterior Security Cameras



Appendix E – Building Inspection Reports

- Tapered roof has space available to install at least 30KW PV Solar power system which can roughly produce 38MWh energy units per year. Energy cost saving per year could be around \$4200 and installation cost could be around \$100,000.

Plumbing:

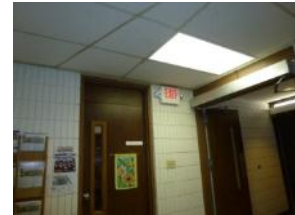
- Year Built:
 - 1950 — Original building plumbing systems.
- Plumbing System Description:
 - A main water line serves the building and is fed by the water main located in the street. A 2 ½" Dia. domestic water line is tapped off the main and penetrates the exterior wall of the building.
- Overall building plumbing system condition:
 - The domestic water distribution system is original to the building. Sections of the domestic water piping insulation are damaged. No provision for backflow protection between the city and the building domestic water supply.
 - A new 50 gallon gas fired water heater was installed for domestic hot water that serves the building.
 - The existing storm and sanitary piping is original to the building. No leaks were observed in the building drainage systems.
 - Fire extinguishers installed throughout the facility in accordance with NFPA 10.
 - Exposed asbestos piping insulation was observed.
- Operational issues:
 - It appears that plumbing fixtures do not comply with present day barrier free requirements. Majority of the fixtures are more than 10 years old. Existing water closets and urinals are not low consumption type.
- Major capital requirements:
 - Current performance rating procedures for this type of domestic water heating system are inadequate to provide estimated energy savings. The new domestic water distribution system with new water meter shall be provided.
 - Plumbing fixtures shall be removed and replaced with new.
 - Asbestos pipe insulation materials should be removed in the mechanical room.



Existing Dining Hall Lighting



Existing Main Dining Hall Lighting



Existing Recessed Lighting and Exit Sign



Existing Recessed Lighting and Speaker



Existing Parking Lot Fixture



Existing Security System



Existing Branch Circuit Panel



Appendix E – Building Inspection Reports



Existing Electrical Panel



Domestic water heater



Broken vertical rain gutter



Sump pump (replaced April 1996)



Gas meter pressure regulator & piping



Electric water cooler



Lavatories in the toilets



Appendix E – Building Inspection Reports

Rose Park Senior Center (ID: 1830) – 3045 North MLK Drive

EUA Architects

- The sidewalk in front of the main entrance is in poor condition, creates a potential tripping hazard.
- The brick exterior façade appears to be in good condition based on ground level inspection. Some areas require tuckpointing or caulking.
- Ceiling tiles are nearing the end of their useful life, some stained from pipe leaks.
- Exit doors don't have panic hardware.
- The kitchen build-out is nearing the end of its useful life, is not ADA compliant.



Sidewalk in poor condition in front of entrance doors



Kitchen at the end of its useful life, not ADA compliant



Excessive incandescent light fixture. Some fixtures in the building are at the end of their useful life



Worn casework, original floor tile in some rooms. Both at the end of their useful life



Missing soffit tiles on south façade



Typical storefront window, two operable single pane glass panels. Brick sills in good condition



Roof generally in good condition



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1980 — Original building mechanical systems.
 - 2004 — Mechanical equipment replacement (chiller, cooling tower, air handling unit, unit ventilators, hot water/chilled water/condenser water pumps, hydronic accessories, cabinet unit heaters, control valves, BAS system)
 - Hot water boiler replaced.
 - 2007 — Hot water boiler burner replacement.
- Mechanical System Description:
 - Heating — Building is provided with single gas fired natural draft hot water boiler, hot water pumps, and associated piping, valving and hydronic accessories to generate and distribute hot water throughout the building. Floor and ceiling mounted unit ventilators, and one air handling unit (main hall) with hot water coils complete with associated ductwork, air outlets, and controls provide heat to the building. In addition, perimeter finned tube radiation and convectors serve as first stage of heating. Cabinet unit heaters are provided at entrances to offset heating load when exterior doors are frequently used.
 - Ventilation — Floor and ceiling mounted unit vents, and one air handling unit (main hall) complete with associated ductwork, air outlets, outdoor air intake louvers/hoods, return/exhaust fans, and controls provide supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — Indoor chiller complete with roof mounted cooling tower and associated pumps, piping, hydronic accessories, and controls generate and distribute chilled water throughout the building. Floor and ceiling mounted unit vents, and one air handling unit (main hall) with cooling coils complete with associated ductwork, air outlets, and controls provide cooling to the building.
 - Kitchen range oven — no kitchen exhaust hood is provided.
 - Electric kiln — no exhaust hood is provided.
 - Ductless split system — serving elevator machine room.



Hot water boiler



Finned tube radiation (janitors closet)



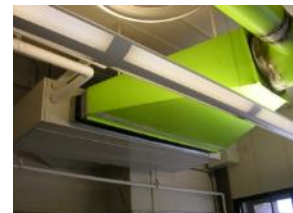
Ceiling cabinet unit heater (at entrance)



Finned tube radiation



Floor mounted unit ventilator



Ceiling mounted unit ventilator



Return/relief/exhaust opening



Appendix E – Building Inspection Reports

- Building automation system — BAS system is a combination of DDC and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Hot water boilers — 20 years (100%)
 - Chillers — 20 years (100%)
 - Cooling towers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating/cooling coils — 20 years (100%)
- Operational issues:
 - Heating
 - No major issues.
 - Ventilation
 - Kitchen range is not provided with exhaust hood.
 - Electric kiln is not provided with exhaust ventilation.
 - Air conditioning
 - No major issues.
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for gradual replacement of outdated heating equipment (finned tube radiation).



Unit ventilator supply ductwork



Unit ventilator outdoor air intake louver



Exhaust fans & split system outdoor unit



Intake/relief hood



Cooling tower



Indoor chiller



Chilled/condenser water piping & pumps



Appendix E – Building Inspection Reports

- Ventilation — none at this time.
- Air conditioning — none at this time.
- Building automation system — replace existing controls with new controls along with mechanical equipment replacement (finned tube radiation).

Electrical:

- Built Around: 1981
- Existing fire alarm (Johnson Controls system) in good condition.
- Fire alarm conduits should be painted red. Currently only junction box covers are painted red.
- Existing exit signs look fairly new. Unable to confirm age of devices.
- Elevator system is new and in good working condition.
- No existing emergency generator.
- No emergency lighting system inside the building.
- No security lighting system around outside building wall including few exit doors.
- No security camera system around the building.
- Motion sensor security system in place and in working condition.
- Communication antenna system on the roof is in bad to fair condition.
- DUKANE PA system is in working condition.
- The existing motorized shutter system on roof for day light is in working condition.
- Telephone and intercom. system is in working condition but not adequate around the building.
- Overall lighting system is in working condition, however more efficient and energy saving LED lighting may be needed. Especially hall room and where ambient day lighting is not available including bathrooms, lighting is not adequate.
- Motion sensor lighting control may need to be installed for all the bathrooms and utility rooms as possible to minimize power consumption.
- Hall room stage area lighting power system in fair working condition.
- As-built plans show few light fixtures with battery backup system on each floor, however it was not verified.
- Main Distribution Panel is 2000Amp., 120/208V, 3-Phase 4-Wire in fair condition. Existing MDB believed to be original.



Kitchen range oven without exhaust hood



Hot water pumps



Split system indoor unit



DDC thermostat & CO2 sensor



Exit Sign and Ceiling Lights



Roof Mounted Antenna



PA System Equipment



Appendix E – Building Inspection Reports

- There are five sub-panels (A, B, C, D, and E) each 225Amp., 120/208V, 3-Phase, 4-Wire in fair condition.
- New disconnect switches were installed for HVAC system around 2005.
- Building lightning system may need to be tested for proper grounding.
- Flat roof has space available to install at least 30KW PV Solar power system which can roughly produce 38MWh energy units per year. Energy cost saving per year could be around \$4200 and installation cost could be around \$100,000.

Plumbing:

- Year Built:
 - 1980 — Original building plumbing systems.
- Plumbing System Description:
 - There is a copper domestic water supply line to the building. The main shutoff valve is located in the basement. There is a 2" single water meter for the building. All supply piping examined is copper. The visible waste piping is a combination of cast iron and PVC.
- Overall building plumbing system condition:
 - No major deficiencies were noted in the plumbing system during the assessment. The location of the main water line to the property was not determined.
 - The system is provided with hot water re-circulation pump and pipes.
 - New Rheem "AdvantagePlus" domestic water heater was installed in January 2012. There is self-diagnostic electronic control with digital readout for water temperature, set point and differential. Removable front cover allows easy access to equipment. High impact plastic jacket eliminates dents.
- Operational issues:
 - Washrooms are located on first and second floors of the building. Majority of plumbing fixtures are less than 10 years old and low consumption type.
 - The plumbing piping in various locations could not be evaluated due to lack of access.



Recessed Light Fixtures



Stage Lighting



Pendant Fluorescent Fixtures



Toilet Room Lighting



Utility Transformer



Branch Circuit Panels



Main Switchboard and Distribution Section



Appendix E – Building Inspection Reports

- Major capital requirements:
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.



Site Light Pole



Fire Alarm Control Panels



Domestic water heater



Wall mounted water closet



Electric water cooler



Hose bibs connection



Fire extinguisher cabinet (at entrance)



Non potable water



Appendix E – Building Inspection Reports

Washington Park Senior Center (ID: 1990) – 4420 West Vilet Street EUA Architects

- Part of the roof has recently been replaced, the remainder is nearing the end of its useful life, with water damage in some areas. The entrance canopy is in poor condition as well.
- The exterior stone and brick work are in good condition based on ground level inspection.
- The building's single pane wood windows are inefficient.
- The building's door hardware consists of knobs, which do not comply with the current ADA. The restrooms are also not fully ADA compliant.
- Some landscape grooming around the building's exterior and parking lot is desirable to increase curb appeal.
- The building is rented out oftentimes after hours, over the weekend.



Entrance canopy in poor condition: wood rotting & metal rusting. Canopy scheduled to be replaced



Typical storefront windows looking into the courtyard. Wood frame with single pane glazing



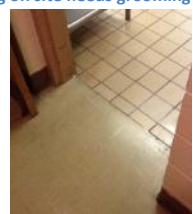
Interior courtyard with landscaping in good condition



Overgrown grass, weeds in parking lot, landscaping on site needs grooming



A typical corridor, doors with non-ADA compliant hardware



Kitchen, hallway floors are worn



Wood plank ceiling is in good condition, some light fixtures are near the end of their useful life



Concealed spline ceiling tile in kitchen and stage area nearing end of useful life



Appendix E – Building Inspection Reports

Singh Inspections

Mechanical:

- Year Built:
 - 1966 — Original building mechanical systems.
 - Cooling tower replacement.
 - Hot water boiler replacement.
 - Gas fired/DX rooftop unit (admin area) installation.
- Mechanical System Description:
 - Heating — Building is provided with two gas fired sealed combustion boilers, hot water pump, and associated piping, valving and hydronic accessories to generate and distribute hot water throughout the building. Floor mounted unit vents, and three (3) air handling units with hot water coils complete with associated ductwork, air baseboard/outlets, and controls provide heat to the building. In addition convectors provide heating in toilet rooms/storages and cabinet unit heaters are provided at entrances to offset heating load when exterior doors are frequently used.
 - Ventilation — Floor mounted unit vents, three (3) air handling units, and a rooftop unit (admin area) complete with associated ductwork, air baseboards/outlets, outdoor air intake louvers/hoods, return/relief/exhaust fans, relief louvers with backdraft dampers, and controls provide supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — Indoor chiller (120 ton, original to the building - 1966), grade mounted cooling tower, and associated pumps, piping, valving, hydronic accessories, and controls generate and distribute chilled water throughout the building. Floor mounted unit vents, three (3) air handling units with cooling coils, and a rooftop unit complete with associated ductwork, air baseboards/outlets, and controls provide cooling to the building.
 - Dust collection system serves the woodworking shop.
 - Crafts room — no local exhaust ventilation.
 - Kitchen range is served by kitchen exhaust hood in good condition. Kitchen exhaust fan may need replacement.



Hot water boilers



Hot water wall convector



Hot water cabinet unit heater



Air baseboard (corridor)



Main hall air baseboard



Dishwasher exhaust



Kitchen range exhaust hood



Appendix E – Building Inspection Reports

- Dishwasher has been replaced. Dishwasher exhaust needs to be modified.
- Building automation system — BAS system is a combination of pneumatic and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Hot water boilers — 20 years (100%)
 - Chillers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Rooftop unit — 15 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating/cooling coils — 20 years (100%)
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for replacement of outdated heating equipment (unit vents, convectors, cabinet unit heaters).



Main hall sidewall registers



Air handling unit AHU-2 (new unit and HVAC piping)



Air handling unit AHU-1 (new unit and HVAC piping)



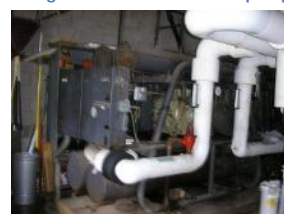
Control damper pneumatic actuators



Condenser water piping (not insulated)



Cooling tower condenser water pump



Chilled water piping



Appendix E – Building Inspection Reports

- Ventilation — establish time schedule and appropriate funds for replacement of outdated ventilation equipment (unit vents).
- Air conditioning — establish time schedule and appropriate funds for replacement of existing chiller and pumps.
- Building automation system — replace existing controls with new controls along with mechanical system replacement.

Electrical:

- Built around: 1968
- Existing fire alarm (Johnson Controls system) is in good condition.
- Existing lighted exit signs are in working condition, however exit signs can be replaced with battery backed exit signs with side mounted emergency lights.
- Emergency lighting system is in place, however emergency generator is not in working condition.
- Partial security lighting system around outside building wall including few exit doors. Noticed LED light fixtures mounted on outside wall at a couple of exits.
- No existing lighting found in fenced area where emergency generator, utility transformer and cooling tower are located.
- No security camera system around the building.
- Motion sensor security system in place and in working condition inside the building.
- Motion sensor lighting control may need to be installed for all the bathrooms and utility rooms as possible to minimize power consumption.
- PA system is in poor condition, possibly not reaching to all the rooms.
- Telephone and intercom system are in bad condition, no voicemail system.
- Overall lighting system is in working condition, however more efficient and energy saving LED lighting may be needed. Especially hall room and where ambient day lighting is not available including bathrooms, lighting is not adequate.



Indoor chiller (original to building)



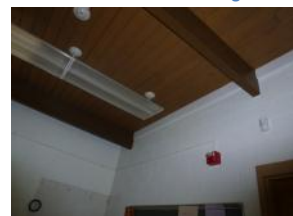
Temperature control air compressor (new)



Dust collection system (woodworking shop)



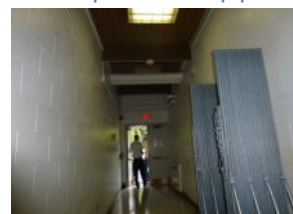
Cooling tower



Lighting and Fire Alarm Device



Fire Alarm Panel and Incoming Telephone Service Equipment



Exit Sign and Smoke Detector



Appendix E – Building Inspection Reports

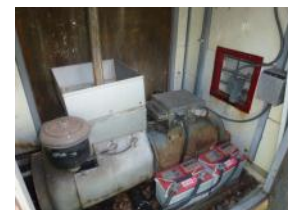
- Hall room stage area lighting power system is in fair working condition.
- Main Distribution Panel is 1600Amp., 120/208V, 3-Phase 4-Wire in fair condition. Existing MDB believed to be original.
- There are eight sub-panels (A, B, C, D, F, G, H, and J) each 200Amp., 120/208V, 3-Phase, 4-Wire in fair condition. Sub-panel E, 60Amp., 120/208V, 3-Phase, 4-Wire is connected to generator (which is not working via ATS (Auto Transfer Switch), which is currently fed from Main Distribution Panel. Stage dimmer Sub-panels (K and L) each 100Amp., and sub-panel M, 60Amp., 120/208V, 3-Phase, 4-Wire is in fair condition. Sub-panels K and L are for motorized dimmer.
- Entire parking lot lighting and lighting around the building are fed from Panel H.
- Building lightning system may need to be tested for proper grounding.
- Flat roof has space available to install at least 30KW PV Solar power system which can roughly produce 38MWh energy units per year. Energy cost saving per year could be around \$4200 and installation cost could be around \$100,000.

Plumbing:

- Year Built:
 - 1966 — Original building plumbing systems.
 - Glycol solar hot water system
- Plumbing System Description:
 - There is a 4" diameter, copper, domestic water supply line to the building. The main shutoff valve is located on the first floor. There is a 3" single water meter for the building. All supply piping examined is copper. The visible waste piping is a combination of cast iron and pvc.
- Overall building plumbing system condition:
 - No major deficiencies were noted in the plumbing system during the assessment. The location of the main water line to the property was not determined.
 - The system is provided with a central glycol solar hot water system – solar collectors and storage tank. Domestic hot water systems use solar energy to preheat the water that is incoming to a conventionally fueled heating tank. This system also incorporates an expansion tank to accommodate the fluctuating volume of fluid due to temperature changes in the fluid.



Generator Shed



Generator



Exterior Lighting Fixture



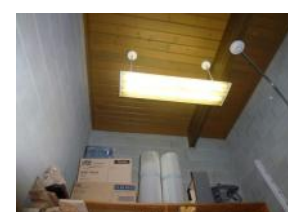
Exterior Light Fixture Empty Socket



Speaker



Incoming Telephone Service Equipment



Pendant Mount Fluorescent Fixture



Appendix E – Building Inspection Reports

- Operational issues:
 - Washrooms are located on first floor of the building. Majority of plumbing fixtures are less than 10 years old and low consumption type.
 - The plumbing piping in various locations could not be evaluated due to lack of access.
- Major capital requirements:
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.



Incandescent Lighting



Main Hall Lighting



Dining Hall Lighting



Fluorescent Light Fixture



Incandescent Light Fixture



Panel H



Main Switchboard



Incoming Electrical Service



Solar DHW tank



Glycol solar hot water system



Solar panels/collectors



Wall mounted water closet



Drinking fountain (original to building)



Two-compartment kitchen sink



Appendix E – Building Inspection Reports

Wil-O-Way “U” Recreation Center (ID: 2680) – 10602 West Underwood Creek Parkway & Wil-O-Way “U” Wading Pool (ID: 2681) – 10602 West Underwood Creek Parkway

EUA Architects

- A new roof was recently installed and the roof structure is in good condition.
- A storage room was recently added to the west side of the building and a new vestibule / classroom addition is planned to replace the current main entrance. That project is being held up at Plan Commission in Wauwatosa.
- Restrooms and kitchen recently remodeled.
- The Department of Family Care occupies 50% of this building. DFC has a compatible social mission with the Recreation Center and the source of rent makes them a desirable tenant. When asked if DFC needed to remain in this building the answer was, definitely, “we need the revenue to sustain”.
- The great room is available to rent out for private events and includes use of the restrooms and kitchen areas.
- Landscape and plantings need grooming; they are overgrown and cause moisture problems against the building.
- The outdoor changing area is an alternating fence board wall structure with no roof but has privacy for boys and girls to change clothes. It is rarely used and deteriorating to the point of disrepair.
- Piping for the filtration system runs underground and the supply and return valves buried with piping system have failed. The water level cannot be maintained without replacing the valves. The concrete bowl structure of the pool is in good condition but has not been used due to the valve failures.



New roof recently installed above main hall



Roof structure/soffits in good condition



Remodeled restrooms



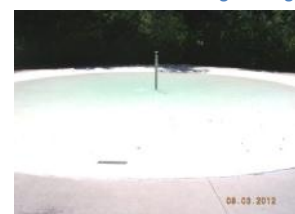
Remodeled kitchen



Dept. of Family Care office crowded, small cubicles



Landscape overgrown, requires grooming



Wading Pool



Exterior wood panels, doors worn in some areas, particularly south façade



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - Original building mechanical (heating/ventilation) systems.
 - 1999 — Added one Trane gas heating/DX cooling furnace.
 - Added three Lennox gas heating/DX cooling furnaces.
 - Added gas heating/DX cooling rooftop unit.
- Mechanical System Description:
 - Heating — Five air handling systems are serving the building. Four of them utilize gas furnaces and one utilizes gas fired rooftop unit. Complete with associated ductwork, air outlets and controls, the air handling systems provide heat to the building.
 - Ventilation — Air handling systems provide minimum code required outdoor air. General exhaust propeller sidewall fans in addition to toilet exhaust ventilation facilitate building exhaust effectively removing code required ventilation air while maintaining positive building air pressure.
 - Air-conditioning — All five air handling systems (four split systems and one rooftop unit) serving the building utilize DX cooling coils, complete with associated ductwork and controls provide cooling to the building. Three of the air cooled condensing units are grade mounted and the fourth is roof mounted. Rooftop unit is serving Main Hall Room only.
 - Kitchen ventilation — Domestic range oven is provided with kitchen range hood.
- Overall building mechanical system condition:
 - Most of the HVAC systems and equipment have been replaced around 2007. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - Gas furnaces — 20 years (100%)
 - Air cooled condensing units — 15 years (100%)
 - Exhaust fans — 20 years (100%)



Lennox gas furnace unit (downflow)



Lennox gas furnace unit (downflow)



Lennox gas furnace unit (upflow)



Trane gas furnace unit



Rooftop unit



Rooftop unit



Trane air cooled condensing unit



Appendix E – Building Inspection Reports

- Rooftop units — 15 years (100%)
 - Ductwork — Life (100%)
 - Diffuser, registers, grilles, dampers — 25 years (100%)
- Operational issues:
 - Heating — Trane gas furnace is in fair condition and is nearing the end of its service life. Electric wall heaters original to the building are beyond the end of their service life.
 - Ventilation — Gas furnaces and rooftop unit appear to be in good condition. Trane gas furnace unit is in fair condition.
 - Air-conditioning — Gas furnace DX coils, associated air cooled condensing units, and rooftop unit appear to be in good condition. Trane gas furnace unit and associated air cooled condensing unit are in fair condition.
- Major capital requirements:
 - Heating— Establish time schedule and appropriate funds for replacement of heating system components which are already beyond or nearing the end of their service life (Trane gas furnace serving the area of Department of Family Care, number of electric wall heaters).
 - Ventilation — Establish time schedule and appropriate funds for replacement of ventilation system components which are already beyond or nearing the end of their service life (Trane gas furnace unit).
 - Air conditioning — Establish time schedule and appropriate funds for replacement of air conditioning system components which are already beyond or nearing the end of their service life (Trane gas furnace unit and associated air cooled condensing unit).
 - Temperature controls — replace existing electro-mechanical controls with new controls along with mechanical system component replacement.

Electrical:

- Incoming phone service cables are exposed to the elements on the exterior of the building. Recommend installing in conduit.
- Phone lines and network (Ethernet) cables are running throughout the building and are not in conduit or wiremold. Cables were typically attached to existing ceiling mounted wiremold with zip-



Outdoor air intake



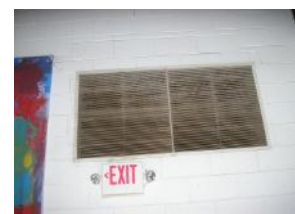
Sidewall propeller exhaust fan



Supply ductwork (Main Hall Room)



Lennox air cooled condensing units



Return grille



Supply ductwork and registers



Air vent



Appendix E – Building Inspection Reports

ties. It is recommended that the cables be installed in wiremold or at the very least cable trays.

- The electrical service entrance equipment looks to be in fair condition. The main breaker is 400Amps and looks to be in fair condition.
- The existing electrical sub-panels A and B should be replaced. Panel A was installed in 1991 per the schedule mounted on the panel door. Panel B was installed in 1984 per the schedule mounted on the panel door and per an electrical drawing from 1984.
- The fire alarm system is a Quick Start by Mirtone. It is unclear when the system was installed. No drawings are available. Some of the components, such as heat detectors and smoke detectors were installed in 1984 as part of a renovation project. Some of the components are original. The age of the building is unclear. Recommend updating the fire alarm system (control panel and components) in the next five years.
- Fire alarm conduits are not painted red.
- Fire alarm system is fed from one of the subpanels, but has no emergency backup power.
- Existing emergency lighting units appear to be original to the building and should be replaced. They are long past their life expectancy.
- The wiring to the existing smoke detector in the main hall is exposed and not installed in wiremold. Currently there is blue painter's tape around the wires. Recommend installation in conduit.
- Existing exit signs look to have been replaced at some point, but it is unclear what year this occurred. Some of the exit signs have battery backup, but not all of them. Recommend replacing exit signs with battery backup as there is no emergency system.
- Existing infrared cameras appear to be in good condition and seem fairly new. Unable to verify with drawings.
- Existing security system was installed in 1984 per as-builts and is nearing the end of its life. Recommend replacement system.
- Existing exterior incandescent flood lights are in poor condition. Recommend replacement with new energy efficient fixtures.
- Existing light fixtures in offices were installed in 1984 per as-builts. Fixtures use T-12 lamps. Recommend replacement of light fixtures with energy efficient lighting.
- Existing light fixtures elsewhere in the building appear to be original. Some fixtures are incandescent, while others are fluorescent fixtures with T-12 lamps. Recommend replacement of all fixtures with energy efficient fixtures.



Electric Meter and Telephone Service



Incoming Telephone Lines



Incandescent Light Fixtures and Existing Telephone Cabling



Lighting, Heat Detector and Telecom Cables



Heat Detector and Telecom Cables



Existing Security Alarm Panel



Existing Sub Panel A



Appendix E – Building Inspection Reports

Plumbing:

- Year Built:
 - Original building plumbing systems.
- Plumbing System Description:
 - There is a copper domestic water supply line to the building. The main shutoff valve is located in the mechanical room. There is a 2" single water meter for the building. A reduced pressure type backflow preventer is provided on the building water service to protect the public water main. There is no cross connection between wading pool and any potable water supply, the water circulation system of pool or sewer. All supply piping examined was copper. The visible waste piping is a combination of cast iron and pvc.
- Overall building plumbing system condition:
 - No major deficiencies were noted in the plumbing system during the assessment. The location of the main water line to the property was not determined.
 - The system is provided with hot water re-circulation pump and pipes.
 - There is a 50-gallon, gas-fired domestic water heater in the mechanical room. The unit efficiency is over 80%.
 - Fire extinguishers installed throughout the facility in accordance with NFPA 10.
 - Wading Pool is not working. Plumbing circulation system is very old. Filter and disinfection equipment should be replaced. Fittings must be secured to provide protection from suction and pressure hazards.
- Operational issues:
 - Washrooms are located on first floor of the building. Majority of plumbing fixtures are less than 10 years old and low consumption type.
 - The plumbing piping in various locations could not be evaluated due to lack of access.
- Major capital requirements:
 - Cold and hot water piping network should be provided with adequate separation valves for maintenance and repair purposes. Valves shall be easily accessible for handling.



Panel Schedule For Panel A



Sub Panel B



Sub Panel B Panel Schedule



Main Distribution Panel



Main Service Breaker



Fire Alarm Panel



Fire alarm Strobe and Horn



Appendix E – Building Inspection Reports

- Older plumbing system for wading pool may not support the pressure and waste removal requirements. Chemical feeding equipment, recirculation pump and valve replacement is recommended. Inefficient existing equipment should be upgraded or changes performed to provide required functionality.



Smoke Detector Wiring Taped



Fire Alarm Annunciator Panel



Fire alarm Strobe and Horn



Emergency Lighting



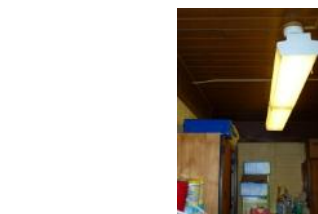
Exit Sign/Emergency Light with Battery Backup



Exit Sign without Battery Backup



Flood Light and Existing Speaker



Fluorescent Fixture with T-12 Lamps



Parking Lot Light Pole



Loudspeaker



Fluorescent Lighting with T-12 Lamps



Wading pool



Pool filter system



Recirculation pump



Water meter for the building



Appendix E – Building Inspection Reports

Wil-O-Way “G” Recreation Center South (ID: 22950) – 207 South Lake Drive EUA Architects

- New 3-season room, entrance corridor and offices are under construction. This exterior area had just a roof covering but has been recently enclosed with windows and low wall, heat, electricity to make it a functional 3 season room.
- A new roof was recently installed and the roof structure is in good condition.
- New kitchen casework with accessible counters, sink.
- The overall exterior of this building is in good condition but suffers from cleaning and minor maintenance items, such as exterior door delamination, eave trim paint or replacement, soffit paint and curb appeal at the main entrance
- The building is frequently used for party rental, weddings, social events, etc. and receives revenue for this.



New 3-season room under construction



New roof recently installed



New kitchen casework with accessible counters, sink



Typical wood window in poor condition



Cleaning and paint needed on exterior, otherwise in good condition



Drinking fountain non-ADA compliant – located too high



Exterior doors are in poor condition



New wood fascia needs painting to match existing



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1979 — Original building mechanical (heating/ventilation only) systems.
 - Added cooling for the entire building.
 - Added 3-Season Room.
- Mechanical System Description:
 - Heating — Air handling systems consisting of air handling units/gas furnace unit with gas fired heating sections, air floor, perimeter air baseboards, and associated ductwork and controls provide heat to the building.
 - Ventilation — Air handling systems (heating season)/cooling only rooftop unit (cooling season) provide minimum code required outdoor air. Exhaust fans provide toilet exhaust ventilation. Make-up air is transferred from the building, effectively removing code required ventilation air while maintaining positive building air pressure.
 - Air-conditioning — Cooling only grade mounted rooftop unit, and associated ductwork and controls provide cooling to the entire building. The air conditioning system is a VVT (variable volume temperature) system consisting of three zone dampers and a bypass damper. It serves Three-Season Room, Art Room and Kitchen, effectively providing zoning and greater control over cooling of the building.
 - Humidification — All three heating/ventilation only air handling systems have inline humidifiers.
 - Kitchen ventilation — Domestic range oven is provided with kitchen range hood.
- Overall building mechanical system condition:
 - Most of the HVAC systems and equipment are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - Air handling units — 20 years (100%)
 - Gas furnaces — 20 years (100%)
 - Exhaust fans — 20 years (100%)



Air handling unit AHU-1



Air handling unit AHU-2



Gas furnace unit



Grade mounted cooling only rooftop unit



Grade mounted cooling only rooftop unit



Inline humidifier (AHU-1)



Inline humidifier and gas fired section (AHU-2)



Appendix E – Building Inspection Reports

- Rooftop units — 15 years (100%)
 - Ductwork — Life (100%)
 - Diffuser, registers, grilles, dampers — 25 years (100%)
- Operational issues:
 - Heating — Gas fired sections as part of the air handling units are original to the building and beyond the end of their service life. Humidifiers are original to the building and beyond the end of their service life.
 - Ventilation — Air handling units are original to the building and beyond the end of their service life.
 - Air-conditioning — It appears cooling only rooftop unit has been added in the last 5 to 10 years and is in fair condition.
- Major capital requirements:
 - Heating— Establish time schedule and appropriate funds for replacement of heating system components which are already beyond the end of their service life.
 - Ventilation — Establish time schedule and appropriate funds for replacement of air handling units.
 - Air conditioning — None required.
 - Temperature controls — replace existing electro-mechanical controls with new controls along with mechanical system replacement.

Electrical:

- 1979 Electrical service equipment appears to have been updated. The main service disconnect was abandoned in 2004 per a note on the disconnect switch. A new panel S-1 was installed at one point and looks to be in good condition.
- The conduits feeding panel S-1 have rust on them and are possibly themselves rusted due to a leak from ceiling or wall above. There is also a broken and corroded conduit in the same area. The conduits should be evaluated and replaced as necessary.
- The main water service is next to the electrical service equipment, which is an issue.
- The fire alarm system is by Notifier and the age is unclear. From the appearance, it is nearing its life expectancy and should be replaced in the next few years. Building engineer wasn't able to answer questions about parts and age of the system.
- Much of the decorative lighting is original when compared to the existing 1979 drawings. Some of the light fixtures, such as those in



Fabric ductwork (Three-season Room)



Air baseboard



VVT system control transformers



Existing main distribution section



Existing main service disconnect abandoned in 2004



Corrosion on existing conduits



Corroded existing electrical conduit



Appendix E – Building Inspection Reports

the main hall, have been replaced with more energy efficient fluorescent fixtures. At some point, it is recommended that the 1979 light fixtures be upgraded to more energy efficient fixtures.

- Electrical/Mechanical rooms are quite cluttered with many of the electrical panels blocked.

Plumbing:

- Year Built:
 - 1979 — Original building plumbing systems.
- Plumbing System Description:
 - There is a approx. 3" diameter copper domestic water supply line to the building. The main shutoff valve is located in the basement. There is a 2" single water meter for the building. All supply piping examined is copper. The visible waste piping is a combination of cast iron and PVC.
- Overall building plumbing system condition:
 - No major deficiencies were noted in the plumbing system during the assessment. The location of the main water line to the property was not determined.
 - The system is provided with hot water re-circulation pump and pipes.
 - There is a 50-gallon, gas-fired domestic water heater in the basement. The unit efficiency is over 80%. Water heater flue tubes show no mineral deposits on the outside perimeter and no rust.
 - Sump pump was observed in the basement.
- Operational issues:
 - Washrooms are located on first floor of the building. Majority of plumbing fixtures are less than 10 years old and low consumption type.
 - The plumbing piping in various locations could not be evaluated due to lack of access.
- Major capital requirements:
 - Water heater flue duct is air tight and not well sealed to the chimney connection.
 - Valves shall be easily accessible for handling.



Electrical service equipment and main incoming water line and meter



Existing fire alarm control panel



Fire alarm horn and strobe



New plumbing fixtures are installed



Gas fired heater is estimated to be 5+ and doesn't require replacement in the short term



Appendix E – Building Inspection Reports

Kelly Nutrition Center – Warnimont Park (ID: 3125) – 5400 South Lake Drive

EUA Architects

- Originally built on a Nike Missile site, this building was constructed as barrack housing for armed forces and wasn't intended to be a permanent structure. The building is constructed of block walls, wood joist roof, wood doors and windows which are thermally inefficient to meet today's energy standards. It has had minimal maintenance and thermal upgrades and has served its useful life.
- A goal of a county owned senior center is to attract local residents to use the facility as a destination place. There is no curb appeal or amenities that would attract more users given the age and aesthetics of this building.
- The building layout and proportions make it difficult to remodel into larger spaces to meet the needs of the various programs that are offered by the County.
- Wood windows are in need of replacement. Most of them have inefficient glass and are deteriorating beyond their useful life.
- The building has under-utilized and unnecessary large corridors and vestibules. This takes away from useable square footage.
- The building has limited storage space; however, 75% of the building was unoccupied at the time of this tour. Staff expressed the concern for more space but it seems slight modifications to the interior could create more efficient spaces.
- No door hardware is ADA compliant. This is of particular concern for an elderly facility where conventional door knobs require twisting of the hand and wrist to open. ADA compliant lever hardware makes this easier to open doors.
- Kitchen casework is non-ADA compliant and is past its useful life.
- Staff expressed concern when occupying two buildings is difficult for residents to traverse outside between buildings especially in inclement weather. Two separate kitchens, moving things between buildings, etc. causes inefficiencies with staff and residents.



South entrance in poor shape



Downspouts bent at base of building



New caulking needed in expansion joints



Kitchen non-ADA compliant, poor condition



Exterior wood siding in poor condition



Columns in main space worn



Typical window, aged



Appendix E – Building Inspection Reports

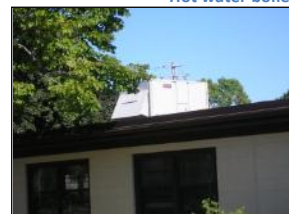
Singh Associates

Mechanical:

- Year Built:
 - 1955 — Original building mechanical systems.
 - 1991 — Hot water boiler replacement.
 - 1995 — Cooling only rooftop units installation.
- Mechanical System Description:
 - Heating — Heating system consisting of a single hot water boiler, a single hot water in-line pump, perimeter fin tube radiation, and associated piping, valving, and controls provides heat to the building.
 - Ventilation — It is believed that ventilation air is provided through the means of operable windows during the heating season and through rooftop units during cooling season. Wall mounted propeller exhaust fan is used to facilitate the removal of ventilation air.
 - Air-conditioning — Two (2) cooling only rooftop units provide air conditioning for the building during cooling season.
 - Kitchen ventilation — Wall mounted propeller exhaust fan provides kitchen exhaust ventilation when domestic range oven is in use.
- Overall building mechanical system condition:
 - Most of the HVAC systems and equipment are at the end or beyond the end of their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%).
 - Hot water boilers (gas) — 20 years (100%).
 - Piping/equipment insulation — 15 years (75-100%)
 - Freeze protection — 15 years (100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Rooftop units — 15 years (100%)
 - Ductwork — Life (100%)
 - Diffuser, registers, grilles, dampers — 25 years (100%)



Hot water boiler



Cooling only rooftop unit (west)



Cooling only rooftop unit (east)



Supply register



General exhaust



Kitchen exhaust



Hot water in-line pump



Appendix E – Building Inspection Reports

- Operational issues:
 - Heating — Hot water boiler has reached the end of its service life. Hot water in-line pump appears to have been replaced in recent years and is in good condition.
 - Ventilation — Wall mounted propeller exhaust fans appear to be original to the building and are beyond the end of their service life. During heating season, building may lack sufficient outdoor air.
 - Air-conditioning — Rooftop units are beyond the end of their service life.
- Major capital requirements:
 - Heating— Establish time schedule and appropriate funds for replacement of heating system.
 - Ventilation — Verify building is provided with sufficient outdoor air year round. Establish time schedule and appropriate funds for providing year round mechanical ventilation if such is preferred.
 - Air conditioning — Establish time schedule and appropriate funds for replacement of air conditioning equipment.
 - Temperature controls — replace existing electro-mechanical controls with new controls along with mechanical system replacement .

Electrical:

- Main electrical service equipment was replaced in 1995 per existing drawings. The system is now 17 years old, but is in good shape. There are at least another 13 years of life for this system.
- Fire alarm system was replaced approximately 3-5 years ago. New system is by Johnson Controls.
- Fire alarm conduits should be painted red. Currently only junction box covers are painted red.
- Exit signs and battery backed up emergency lights appear to be in good shape and look to have several years of life left. It is unclear when the system was upgraded.
- Exterior building wall-pack light fixtures appear to be in good shape and fairly new. Drawings not available to verify age.
- Parking lot lighting is in good shape.
- Various interior light fixtures have cracks in the lenses. Lenses should be replaced as part of regular maintenance.



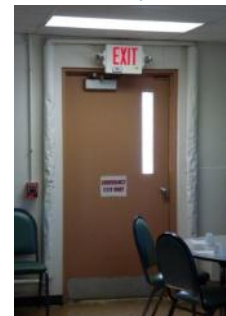
Finned tube radiation



Existing fire alarm control panel



Fire alarm conduits not painted red



Existing exit sign



Emergency lighting battery pack



Existing exterior wall-pack lights



Appendix E – Building Inspection Reports

- There are areas where the conduits penetrate the walls and ceilings, but the holes were not sealed. It is recommended that these penetrations be sealed.

Plumbing:

- Year Built:
 - 1955 — Original building plumbing systems.
- Plumbing System Description:
 - A main water line serves the building and is fed by the water main located in the street. A 2 ½" Dia. domestic water line is tapped off the main and penetrates the exterior wall of the building.
- Overall building plumbing system condition:
 - The domestic water distribution system is original to the building. Sections of the domestic water piping insulation are damaged. There is no provision for backflow protection between the city and the building domestic water supply.
 - A new 50 gallon gas water heater installed for domestic hot water that serves the building.
 - The existing storm and sanitary piping are original to the building. No leaks were observed in the building drainage systems.
 - Fire extinguishers installed throughout the facility in accordance with NFPA 10.
 - Natural gas is piped to the kitchen equipment and the domestic water heater.
- Operational issues:
 - It appears that plumbing fixtures do not comply with present day barrier free requirements. Majority of the fixtures are more than 10 years old. Existing water closets and urinals are not low consumption type.
- Major capital requirements:
 - Current performance rating procedures for this type of domestic water heating system are inadequate to provide estimated energy savings. A new domestic water distribution system with new water meter is recommended.
 - Plumbing fixtures should be removed and replaced with new ones.



Existing parking lot light



Existing light fixtures



Cracked light fixture lens



Wall and ceiling pipe penetrations not sealed



Non-compliant water fixture



Piping insulation is damaged



Appendix E – Building Inspection Reports

Kelly Senior Center – Warnimont Park (ID: 3130) – 5400 South Lake Drive EUA Architects

- Originally built on a Nike Missile site, this building was constructed as barrack housing for the armed forces and wasn't intended to be a long term permanent structure. The building is constructed of block walls, wood joist roof, wood doors and windows which are thermally inefficient to meet today's energy standards. It has had minimal maintenance and thermal upgrades and appears to have served its useful life.
- A goal of a county owned senior center is to attract local residents to use the facility as a destination place. There is no curb appeal or amenities that would attract more users given the age and aesthetics of this building.
- The building layout and proportions make it difficult to remodel into larger spaces to meet the needs of the various programs that are offered by the County.
- Wood windows are in need of replacement. Most of them have inefficient glass and are deteriorating beyond their useful life.
- The building has large corridors and vestibules which are underutilized and not necessary spaces. This takes away from useable square footage.
- The building has limited storage space; however, 75% of the building was unoccupied at the time of this tour. Staff expressed the concern for more space but it seems slight modifications to the interior could create more efficient spaces.
- No door hardware is ADA compliant.
- Kitchen casework is non-ADA compliant and is past its useful life.
- The building is not air conditioned and currently utilizes window air conditioner units.
- Staff expressed concern when occupying two buildings is difficult for residents to traverse outside between buildings especially in



Typical corridor



Minimal storage space available, large hall used for extra storage



Kitchen non-ADA compliant, casework worn



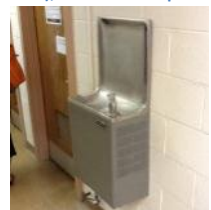
Typical window AC unit



Lobby restrooms remodeled, compliant



Craft hall restrooms in poor condition (women's closed), non-ADA compliant



Drinking fountains non-ADA compliant, projecting hazard



Appendix E – Building Inspection Reports

inclement weather. Two separate kitchens, moving things between buildings, etc. causes inefficiencies with staff and residents.

- The interior concrete floor slab is settling and has sunk near some exterior door thresholds and walls. The county Architect has expressed foundation concerns in this building.
- Restrooms on the north end of building have been recently upgraded to meet ADA standards.
- The restrooms in craft hall are non-ADA compliant and are in poor condition (women's closed).
- The local Fire Inspector requested a second means of egress be provided in large hall per building code requirements.



Growing cracks in multiple walls



Floor slab has settled near door, creating lip at threshold



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1955 — Original building mechanical systems.
 - 1974 — Conversion to senior citizen center.
 - 1991 — Hot water boiler replacement.
 - Hot water boiler renovation and gas burner replacement.
- Mechanical System Description:
 - Heating — Heating system consisting of a single hot water boiler, zone hot water in-line pumps/modulating valves, perimeter fin tube radiation/convectors/unit heaters, and associated piping, valving, and controls provide heat to the building.
 - Ventilation — It is believed that ventilation air is provided through the means of operable windows year round. Wall propeller exhaust fans mounted in some of the rooms provide toilet exhaust and intermittent general exhaust (game room, pantry). Ceiling fans mounted in Lounge and Multipurpose Room increase indoor air movement during cooling season. During heating season, if used, ceiling fans help air destratification.
 - Air-conditioning — Window air-conditioners provide air conditioning in most of the occupied rooms.
 - Kitchen ventilation — Wall mounted propeller exhaust fan provides kitchen exhaust ventilation when domestic range oven is in use.
 - Kiln exhaust ventilation — Wall mounted propeller exhaust fan is providing exhaust ventilation for the room. Makeup air is provided through wall louver with backdraft damper. When kilns are on, the room gets quite hot. Occupants tend to use the kiln only in the evening to reduce excess heat.
- Overall building mechanical system condition:
 - Most of the HVAC systems and equipment are at the end or beyond the end of their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%).



Hot water boiler



Zone hot water in-line pumps



General exhaust (wall propeller exhaust fan)



General exhaust (exercise room)



Ceiling fan



Window air conditioner



Window air conditioners



Appendix E – Building Inspection Reports

- Hot water boilers (gas) — 20 years (100%).
 - Piping/equipment insulation — 15 years (75-100%)
 - Freeze protection — 15 years (100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Rooftop units — 15 years (100%)
 - Ductwork — Life (100%)
 - Diffuser, registers, grilles, dampers — 25 years (100%)
 - Window air conditioners — 10 years (100%)
- Operational issues:
 - Heating — Hot water boiler appears to have been renovated in recent years and is in good condition. Two of the hot water in-line pumps are in poor condition. A third in-line pump appears to have been replaced in recent years and is in good condition.
 - Ventilation — Wall mounted propeller exhaust fans appear to be original to the building conversion to senior citizen center in 1974 and are well beyond the end of their service life. During heating season, building may lack sufficient outdoor air.
 - Air-conditioning — Window air conditioner extension panels cause energy loss year round.
 - Major capital requirements:
 - Heating— Establish time schedule and appropriate funds for replacement of heating system components that are already beyond the end of their service life.
 - Ventilation — Verify building is provided with sufficient outdoor air year round. Establish time schedule and appropriate funds for providing year round mechanical ventilation if such is preferred.
 - Air conditioning — Establish time schedule and appropriate funds for providing central air conditioning system if such is preferred.
 - Temperature controls — replace existing electro-mechanical controls with new controls along with mechanical system replacement.



Window air conditioner/finned tube



Kitchen exhaust fan



Wall propeller exhaust fan (kiln room)



Makeup air louver (kiln room)



Kilns



Thermostat (in-line pump/valve control)



Thermostat (in-line pump/valve control)



Appendix E – Building Inspection Reports

Electrical:

- Year Built: 1955
- Existing fire alarm system was recently (approximately 3-5 years ago) replaced with a new Johnson Controls system.
- Fire alarm conduits should be painted red. Currently only junction box covers are painted red.
- Existing lighting including surface mounted 2'x4' and 2'x2' fluorescent fixtures is not original to the building, but is older than 10 years according to the administrator. Was unable to confirm with drawings.
- Existing electrical service panel is 400Amps, 120/208V and is in fair condition. Believed to have been replaced in 1974 according to panel schedules.
- Subpanels B (left and right) located in the boiler room are believed to have been installed in 1974. They are in poor to fair condition.
- Existing exit signs look fairly new. Unable to confirm age of devices.
- Existing Bogen intercom system is approximately 6-7 years old. In general the sound quality is poor according to the users and it sounds hollow in the large rooms. In addition, there are areas where the intercom isn't able to be heard. Recommend adding some speakers to improve volume of system.
- Lighting in bathrooms looks to be the same as elsewhere in the building. The bathrooms were made ADA compliant approximately 5 years ago. The lighting for the building could have been replaced at that time. Or the existing lighting in the bathrooms may not have been updated as part of the ADA upgrades.
- Automatic toilet sensors didn't appear to work. It is possible that the batteries need to be replaced. It is believe that the sensors operate on battery power and are not hard wired.
- Parking lot lighting is original, but seems to be in good condition.
- Exterior building wall-pack light fixtures appear to be in good shape and fairly new. Drawings not available to verify age.
- Disconnect switch for existing kilns has a rusty handle. It is recommended that this switch be replaced.

Plumbing:

- Year Built:
 - 1955 — Original building plumbing systems.
- Plumbing System Description:



Fire Alarm Control Panel



Lighting Fixtures



Fire Alarm Conduit



Light Fixture with Cracked Lens



Main Electrical Panel



Subpanels B (right and left)



Subpanel B (left)



Appendix E – Building Inspection Reports

- A main water line serves the building and is fed by the water main located in the street. A 2 ½" Dia domestic water line is tapped off the main and penetrates the exterior wall of the building.
- Overall building plumbing system condition:
 - The domestic water distribution system is original to the building. Sections of the domestic water piping insulation are damaged. No provision for backflow protection between the city and the building domestic water supply.
 - A new 50 gallon electric water heater exists for domestic hot water that serves the building.
 - The existing storm and sanitary piping is original to the building. No leaks were observed in the building drainage systems.
 - Fire extinguishers installed throughout the facility in accordance with NFPA 10.
 - Exposed asbestos pipe insulation was observed.
- Operational issues:
 - It appears that plumbing fixtures do not comply with present day barrier free requirements. Majority of the fixtures are more than 10 years old. Existing water closets and urinals are not low consumption type.
- Major capital requirements:
 - Current performance rating procedures for this type of domestic water heating system are inadequate to provide estimated energy savings. A new domestic water distribution system with new water meter is recommended.
 - Plumbing fixtures should be removed and replaced with new.
 - Asbestos pipe insulation materials should be removed in the mechanical room.



Subpanel B (right)



Main Electrical Panel Schedule



Bogen Intercom System



Parking Lot Light Pole



Disconnect Switch for Kiln



Piping insulation is damaged



Asbestos pipe insulation



Appendix E – Building Inspection Reports

Wilson Park Senior Center – Wilson Park (ID: 3845) – 2601 West Howard Avenue

EUA Architects

- The asphalt parking lot, especially the driveway to the building, is in poor condition. Portions of the sidewalk are also in poor condition.
- Exterior wood siding is warped, peeling away in various locations.
- Suspended ceiling tiles in the dining hall have stains from leaking pipes.
- The wood roof structure and ceiling appear to be in good condition based on ground level inspection.
- Most of the glass panes in the greenhouse are filled with condensate.



Handicap ramp patched over with asphalt, in poor condition



Asphalt pavement near end of useful life. Driveway is in especially poor condition



Wood siding warped, pulling away from building



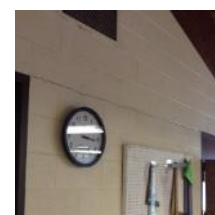
Some ceiling tile in dining hall beyond useful life, stained from mechanical pipe leaks above



Exposed roof structure appears to be in good condition



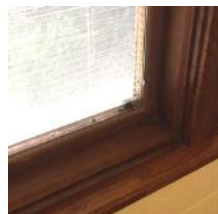
Condensate present in many of the greenhouse glass panels



Crack visible in wall



Typical restroom, stall not fully HC accessible



Typical storefront window. Wood frame with integral louvers, hardware on some windows broken



Exit doors do not have panic hardware



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1980 — Original building mechanical systems.
- Mechanical System Description:
 - Heating — Building is provided with electric hot water boiler/storage tank, hot water pumps, and associated piping, valving and hydronic accessories to generate and distribute hot water throughout the building. One constant air volume and one variable air volume air handling units with hot water coils complete with associated ductwork, fan powered boxes with reheat coils, air baseboard/outlets, and controls provide heat to the building. In addition convectors provide heating in toilet/storage rooms and cabinet unit heaters are provided at entrances to offset heating load when exterior doors are frequently used.
 - Ventilation — One constant air volume and one variable air volume air handling unit complete with fan powered boxes, associated ductwork, air baseboards/outlets, outdoor air intake louvers, return/relief/exhaust/transfer fans, relief louvers, and controls provides supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — Outdoor grade mounted chiller with remote evaporator (108 tons) and associated pumps, piping, valving, hydronic accessories, and controls generate and distribute chilled water to air handling unit cooling coils. Two (2) air handling units (one constant air volume serving the main hall and one variable air volume serving the rest of the building) with cooling coils, complete with fan powered boxes, associated ductwork, air baseboards/outlets, and controls provide cooling to the building.
 - A dust collection system serves the woodworking shop.
 - Craft room — local exhaust ventilation is provided for the electric kiln.



Cabinet unit heater



Electric hot water boiler



Hot water wall convector



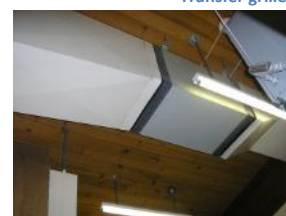
Air baseboard



Intake/Relief hoods



Transfer grilles



Transfer/exhaust in line fan



Appendix E – Building Inspection Reports

- Kitchen range is served by kitchen exhaust hood in good condition. Another kitchen range has no kitchen exhaust hood.
- Ductless split system provides cooling for elevator machine room.
- Building automation system — BAS system is a combination of DDC, pneumatic and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end of or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Hot water boilers (electric) — 15 years (100%)
 - Chillers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating/cooling coils — 20 years (100%)
- Operational issues:
 - Heating
 - Kitchen range has no kitchen exhaust hood.
 - Ventilation
 - No major issues.
 - Air Conditioning
 - No major issues.
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for gradual replacement of heating system and equipment.



Kiln exhaust hood



Woodshop dust collection system



Kitchen range oven without kitchen exhaust hood



Ductless split system indoor unit



Kitchen range oven with kitchen exhaust hood



AHU cooling and heating coils



HVAC piping



Appendix E – Building Inspection Reports

- Ventilation — establish time schedule and appropriate funds for gradual replacement of ventilation system and equipment.
- Air conditioning — establish time schedule and appropriate funds for gradual replacement of air conditioning system.
- Building automation system — replace existing controls with new controls along with mechanical system replacement.

Electrical:

- Built Around: 1980
- Existing fire alarm system in working condition.
- Existing lighted exit signs are in working condition however exit signs can be replaced with battery backed exit signs with side mounted emergency lights.
- Elevator system is believed to be installed in year 2009 and is in good working condition.
- Partial emergency lighting system is in place which can be operational during day time only in case of utility power outage. Existing On-Grid PV Solar power system may provide power to emergency lighting system.
- The existing On-Grid Solar power system is a set of ten 245W rooftop solar modules connected in a series. Solar power system is connected to main distribution system via SMA 3KW inverter. There is no battery backup system to store generated solar energy. The existing solar power system can generate approximately 2.6MWh energy units per year. Energy cost saving per year could be roughly \$300. The solar power system was installed sometime in 2011. Partial security lighting system around outside building wall including few exit doors.
- No security camera system around the building.
- Motion sensor security system in place and in working condition inside the building.
- Motion sensor lighting control may need to be installed for all the bathrooms and utility rooms as possible to minimize power consumption.
- PA system is in poor condition, possibly not reaching all the rooms.



Temperature control air compressor (new)



HVAC piping



Air cooled chiller with remote evaporator



Condenser water piping



Exit Sign and Lighting



Roof Mounted Solar Panels



Motion Sensors



Appendix E – Building Inspection Reports

- Telephone and intercom system are in working condition but inadequate.
- Overall lighting system is in working condition, however more efficient and energy saving LED lighting may be needed, especially in main hall room and where ambient day lighting is not available including bathrooms.
- Noticed that few receptacles in bathrooms are ground fault protected. All bathrooms and wet locations need GFCI receptacles.
- Street lighting along access road around the building is fed from panel PA (277/480V) located inside the building.
- Main Distribution Panel is 1200Amp., 277/480V, 3-Phase 4-Wire in fair condition. Existing MDB believed to be original.
- There are five power sub-panels (PA, PB, PC, PD, and PE) each 100Amp., 277/480V, 3-Phase, 4-Wire is in fair condition. Power sub-panels are feeding local sub-panels (A, B, C, D, and E) thru six 30KVA step-down transformers (277/480V to 120/208V).
- All HVAC utility systems are fed at 277/480V 3-phase, 4-wire.
- Building lightning system may need to be tested for proper grounding.
- Flat roof has space available to install at least 30KW PV Solar power system which can roughly produce 38MWh energy units per year. Energy cost saving per year could be around \$4200 and installation cost could be around \$100,000.

Plumbing:

- Year Built:
 - 1980 — Original building plumbing systems.
- Plumbing System Description:
 - There is a copper domestic water supply line to the building. The main shutoff valve is located in the basement. There is a 2" single water meter for the building. All supply piping examined was copper. The visible waste piping is a combination of cast iron and pvc.
- Overall building plumbing system condition:
 - No major deficiencies were noted in the plumbing system during the assessment. The location of the main water line to the property was not determined.
 - The system is provided with a hot water heater – sealed combustion with circulation booster pump and pipes.
 - New high-efficiency, gas-fired hot water heater "AERCO – KC Series" was installed in April 2011. The condensing heat



Bathroom Receptacle not GFCI



Telephone Service Equipment



Main Hall Lighting



Corridor Lighting



Light Fixture and Conduits



Fluorescent Light Fixture



Utility Transformer



Appendix E – Building Inspection Reports

exchanger design is built to withstand thermal shock. The forced draft, modulating burner operates with 20:1 turndown to achieve 93%-99% thermal efficiency under variable flow conditions yet maintains precise $\pm 4^{\circ}\text{F}$ temperature control.

- New hot water storage tank with Honeywell Aquastat controller was installed in April 2011.
- Operational issues:
 - Washrooms are located on first floor of the building. Majority of plumbing fixtures are less than 10 years old and low consumption type.
 - The plumbing piping in various locations could not be evaluated due to lack of access.
- Major capital requirements:
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.



Main Distribution Panel



Hot water storage tank



Expansion tanks



Plumbing piping



Domestic hot water heater



Drain tile & elevator sump pump



Hand sink in the pantry



Appendix E – Building Inspection Reports

**Phillips Juvenile Justice Center - Children's Court Center– County Grounds
(ID: 5000) – 10201 Watertown Plank Road**

EUA Architects

- The brick veneers on the additions are in good condition. The original building is in need of some tuck-pointing, and the walkway brick walls outside of the main entry are visibly damaged from freeze/thaw cycles.
- The exposed exterior concrete overhangs are visibly worn from water damage. Cracks and peeled paint run along the underside of the overhangs. The 2nd floor concrete balcony by the loading dock is also in poor condition.
- The main building roofs are in good condition. The roof over the circular entry piece has been patched in areas, and the edge of the overhang needs maintenance to prevent further water damage.
- Most of the rooms within the building are in good condition. Carpet, ceiling tiles, and finishes in a few places are nearing the end of their useful life.
- The jail portion of the building is generally in good condition, given the wear and tear incurred daily.
- A translucent film on the windows at the center of the circular entry piece blocks the courtyard from view. With a little maintenance, this courtyard could become a visible light court within the building as originally designed.
- The parking lot is in fair condition. It was near capacity at the time of the visit. Pedestrians in the parking lot crosswalks can be tough to see with parked cars and traffic present.



Concrete overhangs cracked, paint peeled on the underside



Circular roof is patched in various areas



Interior courtyard of circular entry piece. Windows currently have translucent film blocking views into court



Pedestrian path through the parking lot



Brick walkway walls have incurred water damage



Door frames, loading dock equipment rusting



Hot water tanks for roof-mounted solar hot water system



Water hasn't dripped properly off the edge of the concrete roof overhang, causing damage



2nd floor concrete balcony by the loading dock is in poor condition



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - Original building mechanical systems.
 - 1997 — Building mechanical system renovation.
- Mechanical System Description:
 - Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam supply/condensate return piping, condensate return pumps, and associated valving, accessories, and controls provides heat to building heating hot water and domestic hot water heat exchangers. Hot water system consisting of steam to hot water heat exchangers, hot water pumps (15 HP with variable frequency drives), hydronic accessories, valving, piping and controls provides heating hot water for air handling unit heating coils, perimeter finned tube radiation, fan powered box/variable air volume (VAV) box reheat coils, and various heating terminal units (cabinet unit heaters, suspended unit heaters, convectors). Most of the air handling unit heating coils are provided with coil booster pumps. Two steam to hot water heat exchangers provide domestic hot water.
 - Ventilation — Eight (8) variable air volume air handling systems and seven (7) constant air volume multizone/single zone air handling systems complete with wall louvers, supply/return/exhaust ductwork, fan powered and VAV boxes, supply/return/exhaust inlets/outlets, separate return/relief fans, and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building. Air handling unit supply fan motors range from 5.0 to 40 HP, and return fan motors range from 1.5 to 25 HP.
 - Air-conditioning — Building is supplied with chilled water through district cooling plant chilled water mains. Chilled water system consisting of two chilled water pumps (40 HP each with variable frequency drives), chilled water



Steam to heating HW heat exchangers



Hot water pumps



Condensate return pump



Steam to domestic HW heat exchangers



Air handling unit heating/cooling coils



Heating coil booster pump



Wall convector



Appendix E – Building Inspection Reports

supply/return piping, hydronic accessories, valving, and controls distribute chilled water to building air handling units.

- Humidification — Some of the building air handling units are provided with humidification control.
- Variable frequency drives — variable air volume air handling systems supply and return fans and chilled water/hot water distribution pumps have variable frequency drives.
- Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end of their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Heat recovery — 15 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Duct mounted coils — 20 years (100%)
 - Air compressors — 25 years (100%)



Cabinet unit heater



Suspended unit heater



Variable air volume box with reheat coil



Finned tube radiation



DDC thermostat



Return air fan



Hot water piping



Appendix E – Building Inspection Reports

- Major capital requirements:
 - Heating— establish time schedule and appropriate funds for gradual replacement of heating equipment.
 - Ventilation — establish time schedule and appropriate funds for gradual replacement of ventilation equipment.
 - Air conditioning — establish time schedule and appropriate funds for gradual replacement of air conditioning equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement .

Electrical:

- The Electrical system renovation was done in 1994.
- Existing fire alarm (FA) system is original. The FA system wiring has a routing problem. The FA panel has a heat problem. We recommend replacement of entire FA system for building.
- The existing emergency service is provided by a diesel generator on the site. The building engineer stated that the emergency generator is serviced yearly.
- Exit signs are in working order.
- The existing keyless entry system doesn't always work. We recommend replacing the keyless entry system.
- The existing lighting consists of many types of fixtures. There are recessed downlights that look to be original. The majority of these fixtures had the incandescent lamps replaced with compact fluorescents. Some of the building has fluorescent fixtures with T-12 lamps and some of the building has fluorescents with T-8 lamps. The engineer stated that they have replaced all fixtures as part of a Johnson Control grant. Due to the more efficient new fixtures, the building has too high of a lighting level. The build electrician stated that they are taking a few fixtures out because of the lighting level.
- Existing public address (PA) system is original. They are slowly upgrading pieces of it due to complaints of inability to hear the messages.

Plumbing:

- Year Built:
 - Original building plumbing systems.



Wall louver



Duct smoke detector



Dishwasher exhaust hood



Kitchen exhaust hood



Temperature control air compressor



Chilled water incoming service



Chilled water pumps



Appendix E – Building Inspection Reports

- Glycol solar hot water system.
- Plumbing System Description:
 - Steam to domestic hot water (DHW) heat exchanger provides domestic hot water. The location of the main water line to the property was not determined.
 - There is a copper domestic water supply line to the building. The main shutoff valve is located in the basement. There is a single water meter for a building. The domestic water piping is a mixture of galvanized and copper piping. The visible waste piping is a combination of cast iron and pvc. The plumbing piping in various locations could not be evaluated due to lack of access.
 - The main domestic water piping is fiberglass material. The visible waste piping is a combination of cast iron and PVC. The plumbing piping in various locations could not be evaluated due to lack of access.
- Overall building plumbing system condition:
 - Water pressure observed at the fixtures is average to good. Water flows clear at the fixtures.
 - Insulation on all cold and hot water piping is in good condition.
 - The entire building is equipped with stacked washroom groups. The domestic water risers in chases are located between the washrooms and extend from level 1 to the top of the building.
 - The existing plumbing fixtures appear to be original to the building.
 - Water closets are wall & floor mounted, flush tank type.
 - Urinals are floor mounted and wall hung complete with flush valves recessed in wall.
 - Lavatories in main washrooms consist of porcelain, vanity type complete with manual faucets and exposed chrome plated waste piping.
 - Lunch rooms throughout the building are equipped with stainless steel kitchen sinks.



Air handling unit variable frequency drive



Return air fan variable frequency drive



DDC/pneumatic control panel and VFD



Control damper pneumatic actuators



DDC/pneumatic temperature control panel



Control damper electric actuators



Control valve pneumatic actuator



Appendix E – Building Inspection Reports

- The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
- The system is provided with a central glycol solar hot water system – solar collectors and storage tank. Domestic hot water system uses solar energy to preheat the water that is incoming to a conventionally fueled heating tank. This system also incorporates an expansion tank to accommodate the fluctuating volume of fluid due to temperature changes in the fluid.
- No major deficiencies were noted in the plumbing system during the assessment.
- Operational issues:
 - Existing plumbing fixtures cause energy loss year round. Provide new auto-flush valves at new ADA water closet. Plumbing piping shall be insulated and heat traced.
- Major capital requirements:
 - Majority of plumbing fixtures are less than 10 years old and low consumption type.
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.

Fire Protection:

- Year Built:
 - Original building fire protection systems.
- Fire Protection System Description:
 - The system consists of wet-pipe fire suppression sprinklers. The sprinklers in the system are attached to pipes containing pressurized water at all times. Wet-pipe system is used in the building wherever temperatures are high enough to prevent freezing.
 - Automatic fire protection system with flow and tamper alarms is installed in the building. No major deficiencies were noted in the system.
- Overall building fire protection system condition:
 - Due to overall simplicity, wet pipe sprinklers requires the least amount of installation time in renovated areas and capital. The system is pressure tested and restored.



Multizone unit zone damper actuators



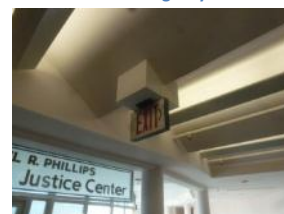
Pneumatic temperature control panel



Fire Alarm Panel



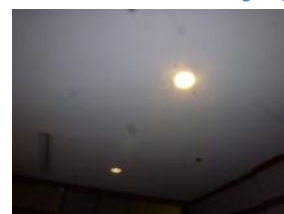
Emergency Generator



Exit Sign



Recessed Fluorescent Lighting



Incandescent Recessed Downlight



Appendix E – Building Inspection Reports

- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are no major capital requirements involved at this time. Corrosion monitoring system can provide early warning of corrosion problems that can do irreparable harm to fire protection systems if left unchecked.
- Summary:
 - Sprinklers are highly desirable for life safety and property protection. Existing automatic fire suppression system is in good condition and requires proper maintenance.



Courtroom Lighting



GYM Lighting



Electrical Room Lighting



Parking Lot LED Lighting



PA system



Substation



Prison Control Cabinet



Floor Data and communication



Step Down Transformer



UPS system for Comm. System



Communication room



Class room communication



Courtroom Control



Emergency Control Panel and Transfer Switch



Steam to heating HW heat exchangers



Incoming steam service



Solar DHW tanks



Glycol solar hot water system



Plumbing piping



Wall cleanout cover plate



Floor mounted urinals



Prison: Lavatory and sink



Appendix E – Building Inspection Reports



ADA approved lavatory



Overmount bathroom sinks



Drinking fountain



Duplex sump pump



Sprinkler heads with vandal proof caps



Upright sprinkler heads and piping



Incoming fire protection cold water line



Fire protection piping



Sprinkler head in the kitchen area



Fire extinguisher with cabinet



Appendix E – Building Inspection Reports

D-16 Mental Health Center – Regional Medical Ctr. (ID: 5040) – 9455 Watertown Plank Rd.

EUA Architects

- Asphalt parking lots and drive lanes are in poor condition. There is an ADA accessible loading area at the main entrance, however, there is no accessible route from the HC parking spaces to the main entry. The grass island between the main entrance and parking lot does not contain any sidewalks to connect the parking to the building.
- Original concealed spline ceiling tile system exists throughout the building and some tiles have been replaced, but they don't match the original tiles. This ceiling system has caused difficulties for staff and contractors doing rework in the building for systems that are above the ceiling.
- Some hallways and offices still have original carpet, which is in poor condition.
- Fire stairway doors have non-ADA compliant hardware.
- Some corridors and vestibules are too narrow for wheelchair access.
- Wauwatosa school district uses a few classrooms & offices in one of the children's wards (also occupies space in the Child & Adolescent Treatment Center).
- Hallways and offices often have a mix of various types of light fixtures, some original, others that have been replaced. Light levels are generally low throughout the building.
- Overall, the roof appears to be in good condition.
- Most public restrooms are in good condition, but are not HC accessible.
- The exterior façade based on ground level visual inspection appears to be in good condition.



Ceiling tile in poor condition, replaced tiles do not match the original



Corridor brick floors in good condition, carpet in poor condition



Office corridor with worn carpet and a few replaced ceiling tiles



Typical corridor in a patient wing



Fire hose cabinets converted to house extinguishers, fire stair door hardware non-ADA compliant, original signage



Original glass in skylight, some panes have filled with moisture



Appendix E – Building Inspection Reports

- Most windows and brick sills are in good condition.



Asphalt shingles approx. 25 years old, generally in good condition



Restroom floor and wall tile typically in good condition, HC stall, vestibule non-ADA compliant



Facade appears to be in good condition, along with the windows and brick sills



Lawn, landscaping in fair condition, patches of dead grass and bare spots in some areas



Asphalt drive to loading dock in poor condition, dock doors worn



Some exterior door frames are worn or corroded, main entrance doors to be replaced



Original control desks in patient units, door lock control system outdated, new paint desirable



Door and frame in poor condition, non-ADA compliant door hardware



Typical stairwell



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1978 — Original building mechanical systems.
 - 1996 — Fire damper replacement.
 - 1999 — VFDs (variable frequency drives) added to air handling unit supply and return fans, and chilled water and hot water pumps. Air flow measuring stations installed at each air handling unit.
- Mechanical System Description:
 - Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam piping, condensate return piping, condensate/vacuum return pumps, and associated valving and accessories provides heat to some of building's eighteen (18) air handling units. Steam to hot water heat exchanger provides heating hot water for the building. Hot water is used for supplemental heating (perimeter finned tube radiation, convectors, and cabinet unit heaters) and to provide heat for reheat coils. Two (2) hot water pumps (30 HP each) circulate hot water throughout the building. Steam to hot water heat exchangers provide domestic hot water. Incoming steam service is located in the north part of Building 5.
 - Ventilation — Eighteen (18) air handling systems (5 to 50 HP supply fan electric motors) with separate return/relief fans and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building. Airflow measuring stations at air handling units ensure code required ventilation air is brought in on a constant basis.
 - Air-conditioning — Building is supplied with chilled water through district cooling plant chilled water mains. Chilled water system consisting of chilled water supply and return piping, two (2) chilled water pumps (40 HP each), and associated valving and accessories provides chilled water to building air handling units. Incoming chilled water service is located in the northeast corner of Building 4.



Perimeter finned tube radiation



Return grille



Condensate return pump (original)



Condensate return pump (recently replaced)



Steam to hot water heat exchanger



Hot water cabinet unit heater



Hot water pump



Appendix E – Building Inspection Reports

- Humidification — Some of the building air handling units are provided with humidification control.
- Variable frequency drives —air handling systems supply and return fans, chilled water pumps, and hot water pumps have variable frequency drives.
- Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Duct mounted coils — 20 years (100%)
 - Air compressors — 25 years (100%)
- Operational issues:
 - Heating
 - Hot water pumps appear to have been replaced in the last 5 to 10 years and are in fair to good condition.
 - Original condensate return pumps are in poor condition and in need of replacement.
 - Ventilation
 - Air handling units outdoor air (OA) and return air (RA) control dampers are original to the building and in need of replacement.
 - Portions of air handling system AHU-3-2 ductwork system duct lining have deteriorated to the point where some of the zone reheat coils get constantly clogged despite their regular cleaning, leaving some of the spaces underventilated (not sufficient heating/cooling) while other spaces are being overventilated.



Hot water suspended unit heater
(mechanical room)



AHU steam coil section



Wall hot water convactor



Supply diffuser



Chilled water pump



Fan coil unit



Chilled water cooling coil



Appendix E – Building Inspection Reports

- Mechanical Room 2218 has no ventilation.
- Air-conditioning
 - Chilled water pumps are in poor condition and in need of replacement.
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for gradual replacement of heating system equipment.
 - Ventilation — establish time schedule and appropriate funds for gradual replacement of ventilation system equipment.
 - Air conditioning — establish time schedule and appropriate funds for gradual replacement of air conditioning system equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement .

Electrical:

- Lighting in Room 1071 is excessive. There are 6 lights in a 36 square foot area. Recommend removing several of the fixtures to reduce the light levels.
- Computer Lab 2102-13: Currently there are several power strips with wiring all over the floor. Recommend additional electrical outlets, possibly floor mounted, to eliminate the hazard.
- Second Floor Storage Room: Recommend occupancy sensors should be installed as the lights are on all of the time.
- Existing security cameras are monitored by Orion Security. The cameras in the public areas record incoming data. The cameras in the patient areas are only monitored, not recorded. The cameras on the exterior of the building produce poor quality video. The building engineer stated that images of cars in the parking lot are barely recognizable. Currently the camera monitors are located in the emergency area (PCS), but they will be moved to the security office.
- The fire alarm system was replaced in 2006 and is approximately 6 years old. The system is expandable and addressable. System is tied to the fire alarm system at Day Hospital.
- One of the fire alarm junction boxes in the food service area was connected with wiremold instead of conduit.
- Existing roof snow melt system cables are plugged in to receptacles mounted to the roof fascia. It is recommended that the existing receptacles be replaced with GFCI receptacles.
- Exit signs are approximately 10 years old. The building engineer stated that they switch to photo luminescent (PL) type about 10 years ago. He anticipates upgrading all exit signs to LED type when



Variable frequency drives



Airflow measuring station control panel



Pneumatic control damper actuator



AHU supply fan section



AHU return/relief fan



Exhaust fan



Mechanical room propeller exhaust fan



Appendix E – Building Inspection Reports

that technology is less expensive. Recommend replacing in the next 5 years.

- Existing 13kV electrical service equipment is original to the building which was built in 1978. The system consists of three 13kV double-ended substations with tie breakers. The two 13kV service feeds come from the local WE Energies power plant. Various pieces of the equipment have been tested in 2008 and 2009. When breakers are old or broken, the engineer sends them out to be rebuilt. The engineer keeps several of the rebuilt breakers as spares. At this point, they don't have issues with finding replacement parts. Given the age of the system, it is approaching or beyond its life expectancy and should be upgraded in the next 5 to 10 years.
- The existing emergency service is provided by a generator at the power plant and there is no emergency generator on the site. The building engineer stated that the emergency loads are fed normally from the 4160V source from the power plant's generators with the 13kV feed transformed down to 4160V running as standby. It is recommended that an emergency generator be installed on site, rather than rely on the power plant's generators. In addition, the emergency loads should be normally fed from the 13kV:4160V service. The building engineer stated that they will be transferring some of the light fixtures on patient floors from the normal service to the emergency service before servicing the substation (Unit 1.4-2) located on the second floor of building four. The lights that are transferred will remain on the emergency circuits after the substation is serviced.
- The existing clock system is by American Time Signal. All clocks are battery operated and are tied together. There are no issues with the system. When system is upgraded, recommend replacing with a hard-wired system.
- The existing lighting consists of many types of fixtures. There are recessed downlights that look to be original. The majority of these fixtures had the incandescent lamps replaced with compact fluorescents. Where there are dimmers controlling the fixtures, the incandescent lamps remain. Some of the building has fluorescent fixtures with T-12 lamps and some of the building has fluorescents with T-8 lamps. The engineer stated that they have replaced fixtures as they fail. They have also been replaced in large groups when energy money is available. The engineer stated that they just bought a very large stock of the T-12 lamps to tie them over until all fixtures are converted to T-8 lamps. Recommend replacement of all building lighting in the next 5 to 10 years.
- Existing public address (PA) system is original. They are slowly upgrading pieces of it due to complaints of inability to hear the messages. They are adding speakers as needed. However, because this facility is now being thought of as a nursing home and



Mechanical room filtered makeup air



Penthouse wall louvers/relief hoods



District heating/cooling plant



Room 1071 Existing Recessed Downlighting



Computer Lab 2102-13 Power Wiring



Security Camera



Fire Alarm Annunciator Panel



Appendix E – Building Inspection Reports

more residential in nature, the number of announcements over the PA system has been reduced drastically.

Plumbing:

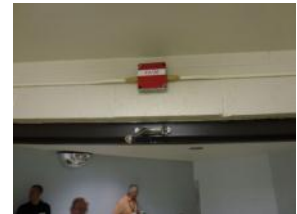
- Year Built:
 - 1978 — Original building plumbing systems.
- Plumbing System Description:
 - The building is served by two 12" water lines, one from northeast for domestic water and one from northwest corner for fire protection, both in Building 4. Steam to hot water heat exchangers provide domestic hot water. A set of pumps circulates hot water from the heat exchangers to the storage tanks and through the building distribution piping. There is a 6" single compound water meter for the building.
 - The main domestic water piping is fiberglass material. All pipe fittings are with asbestos insulation. The visible waste piping is a combination of cast iron and PVC. The plumbing piping in various locations could not be evaluated due to lack of access.
- Overall building plumbing system condition:
 - Water pressure observed at the fixtures is average to good. Water flows clear at the fixtures.
 - Insulation on all cold and hot water piping is in fair condition. At several locations, cold water piping has condensation issues due to lack of insulation.
 - The entire building is equipped with stacked washroom groups. The domestic water risers in chases are located between the washrooms and extend from level 1 to the top of the building.
 - The existing plumbing fixtures appear to be original to the building.
 - Water closets are floor mounted, flush tank type.
 - Urinals are wall hung complete with flush valves recessed in wall.
 - Lavatories in main washrooms consist of porcelain, vanity type complete with manual faucets and exposed chrome plated waste piping.
 - Lunch rooms throughout the building are equipped with stainless steel kitchen sinks.



Fire Alarm Annunciator Panel



Fire Alarm Control Panel



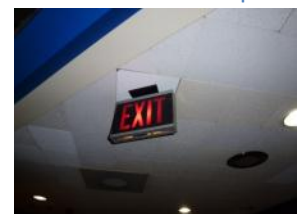
Fire Alarm Horn and Strobe with wire mold



Fire Alarm Strobe with wire mold



Snow Melt Cable Receptacles



Exit Sign



13kV Substation



Appendix E – Building Inspection Reports

- A storm sewer line and a sanitary sewer line leave through the side of the building and connect to the combined sewer in the street.
- Operational issues:
 - Water temperature control — Building design has provided for eleven (11) thermostatic mixing valve assemblies . Only three (3) thermostatic mixing valve assemblies with packaged components have been installed in existing pumped recirculating hot water systems. Additional eight (8) thermostatic mixing valve assemblies are required to accommodate mixed water temperature control of hot and cold water flow for the building.
 - Majority of plumbing fixtures are more than 10 years old and not low consumption type. Plumbing fixtures shall be replaced with new low consumption fixtures.
 - The existing storm and sanitary piping systems are original to the building and are in fair condition.
 - Drain sump pumps are not fully automatic control.
- Major capital requirements:
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.

Fire Protection:

- Year Built:
 - 1978 — Original building fire protection system.
- Overall building fire protection system description:
 - The complete fire suppression sprinkler system is wet type.
 - 12" water service with individual control box is located inside the building.
 - A 75 HP fire pump and 2 HP jockey pump are located in the mechanical room.
- Safety:
 - The building is bounded by fire rated doors, dampers and penetration seals.
- Overall building fire protection system condition:
 - The 75 HP fire pump and motor and 2 HP jockey pump and motors all appear to be in good condition.



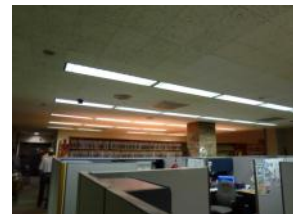
13kV Main Electrical Service



13kV Substation



13kV Substation



Recessed Fluorescent Lighting



Incandescent Recessed Downlight



Recessed Fluorescent Fixtures



Recessed Downlight with Compact Fluorescent



Appendix E – Building Inspection Reports

- No major deficiencies were noted in the fire protection system.
- Existing automatic fire suppression system is in good condition.
- Operational issues:
 - The system was observed in a visual review only.
- Major capital requirements:
 - There are no major capital requirements needed at this time.

Corrosion monitoring system is recommended. It can provide early warning of corrosion problems that can do irreparable harm to fire protection system if left unchecked. Establish time schedule and appropriate funds if such system is preferred.



Breaker with Tested Sticker



Emergency Lighting Fixture



Emergency Panels



Storage tanks with circulation pumps



Shell and tube heat exchanger



Trapped drain tile receiver (original to building)



6" water meter on concrete base



Circulation pumps



Concealed type sprinkler head



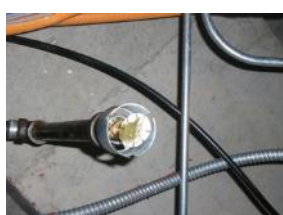
Fire pump



Fire extinguisher cabinet



Electrical room Halon system



Pendant type sprinkler head



Appendix E – Building Inspection Reports

D-18 Food Service Bldg. – Regional Medical Ctr. (ID: 5060) – 9150 Watertown Plank Rd.

EUA Architects

- The food prepared in this facility serves only the CATC, Mental Health Complex, Day Hospital and various Senior Centers. This equates to less than 200 meals every day.
- The food service building once served the entire medical complex, but when the medical complex and services were downsized fewer meals were required. The building in its current state is very large for the amount of meals it needs to produce. The second level is used for dry goods storage which is not only inefficient to move product from storage into production, but the storage required only consumes half of the overall floor.
- There are many refrigerators and freezers which are original to the building and are presumably inefficient.
- The building is not air conditioned.
- Exterior windows are single pane glass in steel frames which are not energy efficient.
- What was the main entry vestibule and loading area on the east side is no longer used as an entry and is filled with unused carts.
- Various portions of flooring have been replaced over time, epoxy flooring has been applied to one area in the kitchen to keep water from leaking below into basement.
- A few cracks are visible in the penthouse CMU wall and first floor structural slab.
- The building's main entrance is not handicap accessible, exit doors do not have panic hardware.
- The asphalt parking lot is beyond its useful life and the exterior of the loading dock is worn.
- A large amount of old furniture equipment is stored in the basement.
- The food service operation is contracted out, no county employees work in the building.



Operable windows, typical. Most are single pane glass windows



Floor is generally in good condition, tile has been replaced in various areas over time



A few visible cracks in the building's structure



Walls worn, damaged in some areas



The main entrance is in poor condition: concrete steps damaged and railings rusting. The entry is not HC accessible



Asphalt drives and parking lot are beyond their useful life



Bathrooms not HC accessible. Bathrooms, locker rooms in fair condition



Stairwell handrails only on one side, paint worn off the wall in a couple areas



Most doors are worn, do not have non-ADA compliant hardware



Appendix E – Building Inspection Reports



Roof appears to be in good condition



Typical corridor in basement



Brick work in fair condition, tuck pointing needed in some areas



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

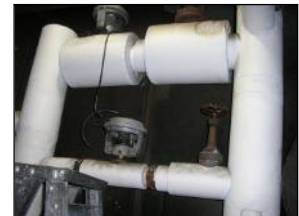
- Year Built:
 - 1955 — Original building mechanical systems
 - 1980 — Kitchen hoods/fans replacement
 - 1999 — BAS work
- Mechanical System Description:
 - Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam piping, condensate return piping, condensate/vacuum return pumps, and associated valving and accessories provides heat to building's three (3) air handling units. Steam to hot water heat exchanger provides heating hot water for the building. Hot water is used for supplemental heating (perimeter convectors, cabinet unit heaters, and suspended unit heaters). Steam to hot water heat exchanger provides domestic hot water. Some of the kitchen equipment operates on steam and some on natural gas.
 - Ventilation — Three (3) air handling systems (1.5, 5 and 15 HP supply fan electric motors) with dining room return air plenum/duct, and dedicated general and kitchen exhaust fans provide supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — Building is heating/ventilation only system. Cooling is not provided.
 - Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end of or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)



Ceiling cabinet unit heater



Wall convectors



Pneumatic steam valve actuators



Steam piping and valving



Steam to hot water heat exchanger



Steam to hot water heat exchanger



Condensate return pump



Appendix E – Building Inspection Reports

- Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating coils — 20 years (100%)
 - Air compressors — 25 years (100%)
- Operational issues:
 - Heating
 - No major issues.
 - Ventilation
 - Added kitchen sidewall general exhaust fans and dishwasher fan may attribute to exhausted air reentering the building when second floor windows are open.
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for replacement of heating system equipment.
 - Ventilation — establish time schedule and appropriate funds for replacement of ventilation system equipment.
 - Air conditioning — establish time schedule and appropriate funds for provision of air conditioning system if such is preferred.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- Existing 480V electrical service equipment (installed in 1956) appears to have been updated between 1997 and present. Existing drawings show incoming and emergency service from existing substation north of building D-7. Per the 1997 elevator upgrade as-built drawing set, the main 480V panel has a normal feed from Substation USS2A and an emergency feed from Substation USS2B. However, during the site visit, it was noted that the building has a dedicated transformer from the utility company with a utility meter on the outside of the building. Per the 1997 set of drawings, the elevator and other 480V equipment were fed via a wireway



Hot water pumps



Steam to hot water heat exchangers



Steam, condensate, and hot water piping



Steam to domestic HW heat exchangers



Condensate return pump



Steam piping



Suspended steam unit heaters



Appendix E – Building Inspection Reports

and tap into the load side of the transfer switch ahead of the main 480V disconnect switch. During the site visit, it was apparent that the main disconnect switch was replaced with a 480V, 800Amp main distribution panel, which has breakers for the elevator and other 480V loads. The panel feeds the original 480V to 120/208V transformer, which then feeds the 600Amp main panel MD/PL. Panel MD/PL is original to the building per the as-built drawings dated 1955. Panel MD/PL is main lug only and the main bus bar with lugs is exposed. Recommend replacement of the original panel with a new 120/208V, 600Amp panel.

- Branch panels throughout the building appear to be original. Recommend replacement and possibly relocation of the panel on the first floor centrally located. Panel is in poor condition, is mounted low to the ground and is covered in food particles. Recommend replacement of panel B/P in the basement by the compressors. The panel is in poor condition.
- Receptacles in kitchen area are not GFCI and are not protected from being hit by carts and portable racks. Recommend replacement of receptacles with GFCI receptacles. Light switches are also in poor shape and should be replaced.
- Existing security cameras appear to be in good shape. It is unclear when the cameras were installed. As-built drawings for the security cameras were not available.
- The existing fire alarm system was originally replaced in 1990, but appears to have been replaced once again in 2007. The 1990 FBII XL-2 fire alarm panel from Honeywell has a note on it that it is no longer in use and is only a splice box for the new system. The newer fire alarm panel is FireShield Plus by GE and is approximately 5 years old. The system appears to be in good shape. Some of the devices such as the manual pull stations are from the 1990 installation.
- Exit signs are approximately 10 years old. Recommend replacing in the next 5 years.
- Emergency battery pack lights appear to be in good shape. The majority are approximately 10 years old. Some of the fixtures look to be from the 1970's and should be replaced. The battery in one of the older fixtures was replaced in April of 2012.
- The existing lighting consists of many types of fixtures. There are recessed downlights that look to be original. The majority of these fixtures had the incandescent lamps replaced with compact fluorescents. Some of the building has fluorescent fixtures with T-12 lamps and some of the building has fluorescents with T-8 lamps. In 1982, the existing light fixtures were replaced with recessed 2'x4' fluorescent light fixtures on the first floor. The basement has fixtures that are broken and with bad ballasts. The penthouse still has incandescent lamps in the light fixtures. Recommend replacement of incandescent lamps with compact fluorescents



Steam powered kitchen equipment



Kitchen exhaust hood (installed most probably 1980)



Dishwasher exhaust



Kitchen exhaust hood (kitchen equipment underneath removed)



Air handling unit (appears original to building)



AHU supply fan section



Return/relief fan



Appendix E – Building Inspection Reports

where possible. Recommend replacement of all building lighting in the next 5 to 10 years.

- Exterior building lighting is in fair condition. Recommend replacing existing rusted conduits feeding existing building light fixtures.

Plumbing:

- Year Built:
 - 1955 — Original building plumbing system.
- Plumbing System Description:
 - Domestic water is original to the building. The system uses a large storage tank with a steam supplied shell and tube heat exchanger.
 - The domestic water service enters the basement in the entry into the mechanical room.
 - The system consists of two steam to water heat exchangers/converters with circulating pumps. The recirculating pumps appear to be in good condition.
 - Domestic water piping in the building appears to be copper with soldered joints. Generally, the piping appeared to be in fair condition for its age with no observed leaks.
 - Soil, waste and vent piping consists of cast iron piping. Most cast iron piping that could be observed appeared to be in fair condition for its age with no apparent leaks.
 - The gas service enters the side of the building with the meter located outside the main building entry the mechanical room. All piping is black steel with welded and threaded joints. The gas piping appears to be in good condition.
- Overall building plumbing system condition:
 - All main risers are galvanized. For supply lines and smaller drain lines where galvanized pipe is used, pipes rust and corrode over time, leading to low pressure and leaks. Existing plumbing equipment, piping hangers, supports, valves, pumps, and gas piping are original and appeared to be in fair condition.
 - The majority of plumbing fixtures and related trim in the building appears to be in fair to poor condition and in general need of major replacement.



Built-up AHU outdoor air intake section (interior)



Built-up AHU supply fan section (interior)



Pneumatic control damper actuator



New portable TC air compressor



HVAC piping



Kitchen sidewall/dishwasher fans



Window air conditioner



Appendix E – Building Inspection Reports

- The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
- The type of piping installed at all areas is not indicated. Temperature mixing valves are not installed.
- Operational issues:
 - Existing plumbing fixtures cause energy loss year round. Provide new auto-flush valves at new ADA water closet. Plumbing piping should be insulated and heat traced.
 - Older plumbing system may not support the pressure and waste removal requirements of modern functions.
 - Provide temperature mixing valves.
 - Install shut-off valves for every water supply to fixtures.
- Major capital requirements:
 - The overall condition of plumbing systems is not operated properly with minimum downtime for repair. All valves need adjustment, O-ring and packing replacement, gasket replacement, filter changes, and gate, globe and seat replacements to prevent leaks.
 - Older fixtures do not have the flow characteristics of newer ones. Older fixtures are likely to have higher flow rates while newer fixtures can save a great deal of water – as much as 50%.
 - Provide new reduced-pressure backflow preventers with upstream and downstream shutoffs and test fittings to protect potable water in continuous-pressure conditions and against high hazard contaminations.



Dining hall used as a storage space now



District power plant



Utility Transformer



Transformer and Panel MD/PL



Panel MD/PL with Exposed Bus and Lugs



Incoming Electrical Service Meter



Panel B/P Located in Basement by Compressors Should Be Replaced



Electrical Branch Panels



Kitchen Panel



Appendix E – Building Inspection Reports



Receptacles (not GFCI)



Equipment Receptacle and Panel



Light Switches



Light Switch and Receptacle



Light Switches



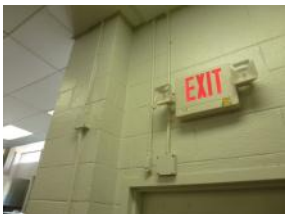
Security Camera



Lighting and Fire Alarm Device



Fire Alarm Panels



Exit Sign with Emergency Lights



Emergency Battery Pack Light Fixture from 1970's



Existing Porcelain Fixture with Compact Fluorescent Lamp



Recessed Downlight with Compact Fluorescent Lamp



Recessed Fluorescent Hinged Fixtures on Second Floor



Light Fixture with T-8 Lamps



Existing Second Floor Lighting



Compact Fluorescent Lamp in Kitchen Hood



Exterior Light Fixture with Rusted Conduits



Service sink



Exposed sanitary piping in the bathroom



Wall mounted water closet



Domestic hot water storage tank



Floor mounted urinal (installed probably 1990)



Incoming cold water service



Abandoned storage tank



Appendix E – Building Inspection Reports



Galvanized plumbing piping



Sump pump



Fire extinguisher cabinet



Plumbing piping in chase (appears original to building)



Original sanitary, vent, cold water piping (interior view)



Appendix E – Building Inspection Reports

D-19 Day Hospital – Regional Medical Ctr. (ID: 5070) – 9201 Watertown Plank Rd.

EUA Architects

- In addition to offices, the building houses various large assembly spaces including a gymnasium, auditorium and bowling alley.
- A majority of the second floor is leased office space. St. Charles utilizes a portion of the first floor.
- The original locker room finishes - floor tile, wall tile, lockers and benches are all in good condition but the space is no longer used as locker rooms. It currently is utilized as storage.
- The basement is generally in good condition, a few areas show signs of water damage on the floor.
- The basement has a large amount of storage space.
- Second floor bathrooms are in fair condition but are not ADA compliant.
- The wood soffit is generally in good condition, paint has peeled off on some of the fascia. The exterior beams show signs of water damage.
- Roof shingles are in fair condition, show signs of aging.
- Auditorium furnishings, carpet beyond useful life. The ceiling shows signs of a roof leak in one area.
- Much of the interior is still original, shows signs of aging.



Locker room in good condition, currently utilized as storage space



Water damage to basement floor



Basement contains good amount of storage space, cubicle partitions currently stored in corridor



Floor, tile in good condition, restroom non-ADA compliant



Roof shingles in fair condition, show signs of aging



Water damage to exterior wood beam, most beams in similar condition



Appendix E – Building Inspection Reports



Some ceiling tiles in poor condition, replaced tiles do not match the original



Typical window



Typical corridor with storefront window



Fire hose cabinets converted to portable extinguisher cabinets



Exterior door and frame in poor condition, damage to threshold and floor



Drinking fountain non-ADA compliant



Typical interior corridor



Typical stairwell



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1988 — Minimal office renovation.
 - 1999 — VFDs (variable frequency drives) added to air handling unit supply and return fans, and chilled water pumps. Air flow measuring stations installed at each air handling unit.
- Mechanical System Description:
 - Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam piping, condensate return piping, condensate/vacuum return pumps, and associated valving and accessories provides heat to building eleven (11) air handling units. Heated air is delivered through floor/sill mounted air cabinets (air baseboards) along the perimeter of the building and in some spaces through ceiling mounted diffusers/registers. Steam to hot water heat exchanger provides heating hot water for a snow melting system. Steam to domestic hot water (DHW) heat exchanger provides domestic hot water.
 - Ventilation — Eight (8) heating/cooling dual duct air handling systems (1.5 to 30 HP supply fan electric motors) with separate return/relief fans and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building. Additional three (3) heating/ventilating only units (0.75 to 7.5 HP supply fan electric motors) serve the building. Airflow measuring stations at air handling units ensure code required ventilation air is brought in on a constant basis.
 - Air-conditioning — Building is supplied with chilled water through district cooling plant chilled water mains. Chilled water system consisting of chilled water supply and return piping, two (2) chilled water pumps (20 HP each), and associated valving and accessories provides chilled water to building air handling units.



Steam convector



Steam suspended unit heater



Air handling unit (steam heating coil)



Steam humidifier



Steam/chilled water piping



Dual duct reheat box



Steam to DHW heat exchanger



Appendix E – Building Inspection Reports

- Humidification — Most of the building air handling units are provided with humidification control.
 - Snow melting system consisting of steam to hot water heat exchanger, in-line pump, supply/return piping, concrete slab loops, valving, and accessories maintain main entrance sidewalks clear of snow/sleet/ice in winter.
 - Variable frequency drives — air handling systems supply and return fans, and chilled water pumps have variable frequency drives.
 - Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
- Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating/cooling coils — 20 years (100%)
 - Air compressors — 25 years (100%)



Snow melting heat exchanger



Snow melting inline pump



Reheat box inlet ductwork



Sill mounted air cabinet (air baseboard)



Air handling unit (supply fan section)



Exhaust/relief fan



Valve



Appendix E – Building Inspection Reports

- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for gradual replacement of heating system equipment.
 - Ventilation — establish time schedule and appropriate funds for gradual replacement of ventilation system equipment.
 - Air conditioning — establish time schedule and appropriate funds for gradual replacement of air conditioning system equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- Existing security cameras are monitored by Orion Security. Cameras appear to be in fair condition.
- Per as-built drawings, the fire alarm system was replaced in 2003 and is approximately 9 years old. The system is expandable and addressable. System is tied to the fire alarm system at the Mental Health Facility. Fire alarm conduits are not painted red to distinguish them from other conduits.
- Exit signs are approximately 10 years old. The building engineer stated that they switched to photo luminescent (PL) type about 10 years ago. He anticipates upgrading all exit signs to LED type when that technology is less expensive. There were a variety of types of exit signs installed at various times throughout the facility. Recommend replacing any units older than 10 years in the next 5 years.
- Existing 13kV electrical service equipment is original to the building which was built in 1978. The system consists of one 13kV double-ended substation (USS-22B) with tie breakers. The two 13kV service feeds come from the local WE Energies power plant. When breakers are old or broken, the engineer sends them out to be rebuilt. The engineer keeps several of the rebuilt breakers as spares. At this point, they don't have issues with finding replacement parts. Engineer stated that they will be relabeling panels and will be testing all circuit breakers in the existing substations in the near future. Given the age of the system, it is approaching or beyond its life expectancy and should be upgraded in the next 5 to 10 years.



Temperature controls air compressor



In-line pump



Air handling unit valving



Airflow measuring station



Variable frequency drive



Abandoned piping and pumps



Air handling unit (cooling coil)



Appendix E – Building Inspection Reports

- In the main substation room, the ground clamp from one of the ground rods to the ground bar is disconnected. Recommend reconnection of clamp to ground bar.
- The existing emergency service is provided by an on-site 30 kW diesel generator. The generator was installed in 2001 per the as-built drawings. The generator is located on the ground floor of building “F”.
- Light switches in bowling alley should be replaced. There is duct tape over one of the switches.
- In the electrical closet/storage room in the gym, there are junction boxes and light fixtures attached directly to the ductwork. This is not an acceptable practice. Recommend that fixtures and junction boxes be moved and mounted from the ceiling.
- In the pavilion building (building “F”), the conduits near and above electrical panel BF/G are corroded. There appears to have been a leak in the wall at one point and all of the conduits below the leak have severe corrosion. Recommend replacement of all conduits.
- Also in the pavilion building, there is an electrical device that is sitting on the floor instead of mounted to the wall. Recommend mounting to the wall.
- In Room 127, the snow melting panel is very rusty and should be replaced.
- Also in Room 127, the electrical panel has a waste pipe within 2 inches of the side. In addition, there are steam lines running above the panel and there is a ladder resting against the panel. Recommend relocating the panel or at the very least installing a metal pan under the steam pipe.
- As in the Mental Health Facility, there is a wide range of light fixture types installed. Many are mostly likely original to the building. There are recessed downlights that look to be original. The majority of these fixtures had the incandescent lamps replaced with compact fluorescents. Where there are dimmers controlling the fixtures, the incandescent lamps remain. Some of the building has fluorescent fixtures with T-12 lamps and some of the building has fluorescents with T-8 lamps. The engineer stated that they have replaced fixtures as they fail. They have also been replaced in large groups when energy money is available. The engineer stated that they just bought a very large stock of the T-12 lamps to tie them over until all fixtures are converted to T-8 lamps. Recommend replacement of all building lighting in the next 5 to 10 years.

Plumbing:

- Year Built:
 - 1967 — Original building plumbing systems.



Chilled water piping



Chilled water pumps



Chilled water pump



Security Camera



Fire Alarm Horn and Strobe



Smoke Detector and Network Cabling



Fire Alarm Panel



Appendix E – Building Inspection Reports

- Plumbing System Description:
 - Steam to domestic hot water (DHW) heat exchanger provides domestic hot water. The location of the main water line to the property was not determined.
 - The main domestic water piping is fiberglass material. All pipe fittings are with asbestos insulation. The visible waste piping is a combination of cast iron and PVC. The plumbing piping in various locations could not be evaluated due to lack of access.
- Overall building plumbing system condition:
 - Water pressure observed at the fixtures is average to good. Water flows clear at the fixtures.
 - Insulation on all cold and hot water piping is in fair condition. At several locations, cold water piping has condensation issues due to lack of insulation.
 - The entire building is equipped with stacked washroom groups. The domestic water risers in chases are located between the washrooms and extend from level 1 to the top floor of the building.
 - The existing plumbing fixtures appear to be original to the building.
 - Water closets are floor mounted, flush tank type.
 - Urinals are wall hung complete with flush valves recessed in wall.
 - Lavatories in main washrooms consist of porcelain, vanity type complete with manual faucets and exposed chrome plated waste piping.
 - Lunch rooms throughout the building are equipped with stainless steel kitchen sinks.
 - No major deficiencies were noted in the plumbing system during the assessment.
 - Fire extinguishers installed throughout the facility in accordance with NFPA 10.
- Major capital requirements:
 - Majority of plumbing fixtures are less than 10 years old and low consumption type.



Fire Alarm Audio Device



Fire Alarm Annunciator Panel



Exit Sign



Exit Sign



Exit Sign



Exit Sign



Stainless Steel Exit Sign



Appendix E – Building Inspection Reports

- Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.

Fire Protection:

- Year Built:
 - 1967 — Original building fire protection systems.
- Fire Protection System Description:
 - Fire suppression for this building consists of standpipe risers and fire hose cabinets. The building is not sprinklered.
- Overall building fire protection system condition:
 - A Siamese fire hose connection is located at the front of the building.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are major capital requirements involved at this time - lack of sprinkler system. Building does not meet current codes and standards. Automatic fire protection system with flow and tamper alarms is required for the building.



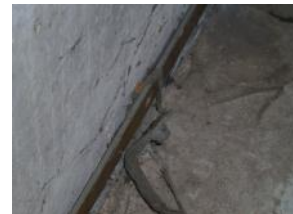
13kV Substation



13kV Substation



Automatic Transfer Switch



Ground Clamp Not Connected



30kW Diesel Generator



Rusted Conduits in Building F



Rusted Conduits and Area of Leakage



Conduits with Corrosion from Leak



Rusted Panel BF/G



Panel BF/G with Rust



Equipment Not Mounted to Wall



Rusted Snow Melt Panel



Ladder Resting Against Electrical Equipment



Panel with Waste Pipe and Ladder



Steam Supply Line Over Electrical Panel



Exterior Light Fixtures with Compact Fluorescent Lamps



Appendix E – Building Inspection Reports



Pendant Mounted Light Fixture



Battery Backup Emergency Light Fixture



Fluorescent Light Fixture



Fluorescent Light Fixture



Smoke Detector



Track Mounted Lighting with Compact Fluorescent Lamps



Light Fixtures



Wall Mounted Light Fixture



Recessed Light Fixture with Compact Fluorescent Lamp



Recessed Fluorescent Light



Gymnasium Fluorescent Lighting



Gym Life Safety Equipment without Wireguards



Rusted Panel BF/G



Computer and Network Cabling in Dark Room



Recessed Fluorescent Lighting



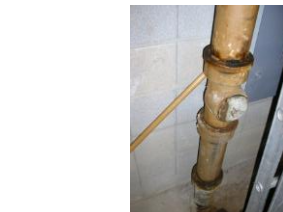
Emergency Panel



Loudspeaker



Cover is missing for electric water cooler



Sanitary water piping



Electric water cooler



Domestic water storage tank



Water closet is missing



Kitchen sink



Fire Extinguisher with Cabinet



Appendix E – Building Inspection Reports

D-20 Child & Adolescent Treatment Center – Regional Medical Ctr. (ID: 5080) – 9501 Watertown Plank Rd.

EUA Architects

- The exterior sidewalk, parking lot, and driveways are in very poor condition. The numerous cracks and unevenness in sidewalks create a potential tripping hazard and are a safety concern. Curb ramps, loading zone ramps, and handicapped accessibility should be considered when upgraded. Discussions with staff noted that the Watertown Plank Road Freeway exit project may affect a portion of this site and parking lot. A frontage road is planned at the front of the facility in lieu of access from Watertown Plank Road and the entrance will be relocated.
- The indoor pool has been out of operation for more than 10 years due to the high cost of operation and the limited use / revenue it was receiving. Although not in use for this period of time, the pool appears to be in good condition and functional. The adjoining locker rooms are also in good condition and are used for storage presently.
- The basement is very large and not utilized besides minor storage.
- The loading dock on the back side of the building is in very poor condition. Pavement, curbs, driveway and sidewalk are beyond their useful life.
- Each resident wing has occupancy available for 22 people.
- The Wauwatosa School District, UW Extension, and Milwaukee County EMS occupy the building.
- Given its age and lack of upgrades, this building functions for its current use, but its finishes and curb appeal are dated and unappealing.



Cracks and unevenness in sidewalk create a potential tripping hazard



Asphalt drive is beyond useful life, landscaping and overall appearance of loading dock area is poor



Indoor pool and adjoining locker rooms in good condition, pool not currently in operation



Lots of excess space is available in the basement for storage



Exterior door and frame, threshold worn



Typical hallway in Wauwatosa school building



Typical restroom, in fair condition. Not fully HC accessible



Paint on corrugated metal worn throughout the façade



Some floors in poor condition



Non-ADA compliant drinking fountain



Landscape maintenance needed in interior courtyards



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1969-1974 — Original building mechanical systems.
 - 1983 — Buildings D, E & F general exhaust remodeling (code violation issues).
 - 1987 — Building E & F remodeling.
 - 1990 - Gym & Pool air conditioning installation (chilled water piping and cooling coils addition, and chilled water pump replacement/installation).
 - 1996 — Fire dampers installation/replacement.
 - 1996 — Building C: Perimeter radiant ceiling panels installation.
 - 1999 — VFDs (variable frequency drives) added to air handling unit supply and return fans, and chilled water and hot water pumps. Air flow measuring stations installed at each air handling unit.
- Mechanical System Description:
 - Heating — Building is supplied with steam through district heating/power plant steam mains. Steam system consisting of steam piping, condensate return piping, condensate/ vacuum return pumps, and associated valving and accessories serve steam to hot water heat exchangers and air handling unit humidifiers. Steam to hot water heat exchanger provides heating hot water for the building. Hot water is used for supplemental heating (perimeter finned tube radiation, perimeter floor radiant heating, convectors, and cabinet unit heaters) and to provide heat for reheat coils and air handling unit heating coils. Two (2) large hot water pumps (75 HP each) and two (2) smaller ones (3.0 HP) circulate hot water throughout the building. Steam to hot water heat exchangers provide domestic hot water.
 - Ventilation — Twelve (12) air handling systems (5 to 75 HP supply fan electric motors) with separate return/relief fans and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building. High velocity single duct reheat units (boxes) provide necessary zoning. Airflow measuring stations at air handling units ensure code required ventilation air is brought in on a constant basis.



Perimeter finned tube radiation



HW/CHW pumps



HW/CHW pumps



Air handling unit chilled/hot water piping



Steam to hot water heat exchangers



HW/CHW pumps



HW/CHW pumps and variable frequency drives



Appendix E – Building Inspection Reports

- Air-conditioning — Building is supplied with chilled water through district cooling plant chilled water mains. Chilled water system consisting of chilled water supply and return piping, two (2) chilled water pumps (60 HP each), and associated valving and accessories provides chilled water to building air handling units.
 - Humidification — Most of the building air handling units are provided with humidification control.
 - Variable frequency drives — air handling systems supply and return fans, chilled water pumps, and hot water pumps have variable frequency drives.
 - Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
- Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Duct mounted coils — 20 years (100%)
 - Air compressors — 25 years (100%)



Steam piping



Condensate return pump



Air handling unit heating/cooling coils



Air handling unit filter section



Condensate return pump



District heating/cooling plant



Supply diffuser



Appendix E – Building Inspection Reports

- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for gradual replacement of heating system equipment.
 - Ventilation — establish time schedule and appropriate funds for gradual replacement of ventilation system equipment.
 - Air conditioning — establish time schedule and appropriate funds for gradual replacement of air conditioning system equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- Exit signs are approximately 10 years old. There are a variety of types of exit signs installed at various times throughout the facility. Recommend replacing units older than 10 years in the next 5 years.
- Existing 4160 V electrical service equipment is original to the building, which was built in 1963. The system consists of one 4160V double-ended substation (USS-23A) with tie breaker. The two 4160V service feeds come from the local WE Energies power plant. The substation is located in Room C06 of Building C. Given the age of the system, it is approaching or beyond its life expectancy and should be upgraded in the next 5 years.
- The existing emergency service is provided by an on-site 150 kW diesel generator. It is unclear when the generator was installed, but it appears to be in fair condition. The generator is located in Room C05 of Building C.
- There is a wide range of light fixture types installed. Many are mostly likely original to the building. There are recessed downlights that look to be original. The majority of these fixtures had the incandescent lamps replaced with compact fluorescents. Majority of the building has fluorescent fixtures with T-12 lamps. Recommend replacement of all building lighting with new energy efficient lighting in the next 5 years.
- The age of the existing fire alarm system is unclear. There may have been an upgrade at some point, because one of the panels was converted to a splice box. Could not confirm as building engineer wasn't present at walk-through. The control panel is located in Room C04 of Building C and the model number is 6WAK, F1197G Series. Additionally, there are no audio or visual devices in



Temperature control air compressor



Return/relief/exhaust fan with pneumatic control dampers



Air handling unit supply fan section



Air handling unit and variable frequency drive



HVAC piping



Temperature control air compressor



AHU heating/cooling coil sections



Appendix E – Building Inspection Reports

the corridors and no visual devices in the classrooms in Building C. Pull stations are by Simplex. Recommend replacing and updating the existing fire alarm system in the next 1-3 years. Fire alarm conduits are not painted red.

- Card access system is new as of 2010 drawings.
- Computer Lab Wiring is disorganized. Recommend additional receptacles.
- Auditorium lighting is all incandescent. Recommend upgrading to energy efficient indirect lighting.
- Emergency battery backed-up light fixtures in the gymnasium appear to be old and are in poor condition. Age of the system is unclear. Recommend replacement of all emergency lighting.
- The following are items which need to be verified with the building engineer:
 - Age of security cameras.
 - Age of fire alarm system.
 - Age of exit signs.
 - Age of light fixtures.
 - Age of clock system.

Plumbing:

- Year Built:
 - 1969-1974 — Original building plumbing systems.
- Plumbing System Description:
 - Steam to hot water heat exchangers provide domestic hot water. The location of the main water line to the property was not determined.
- Overall building plumbing system condition:
 - Water pressure observed at the fixtures is average to good. Water flows clear at the fixtures.
 - Insulation on all cold and hot water piping is in fair condition. At several locations, cold water piping has condensation issues due to lack of insulation.
 - The entire building is equipped with stacked washroom groups. The domestic water risers in chases are located between the washrooms and extend from level 1 to the top floor of the building.
 - The existing plumbing fixtures appear to be original to the building.
 - Water closets are floor mounted, flush tank type.
 - Urinals are wall hung complete with flush valves recessed in wall.



Air handling unit



Pool exhaust fans



Return/relief/exhaust fan



4160V Substation USS-23A



150 KW Generator



Fluorescent Light Fixture



Incandescent Recessed Light Fixture

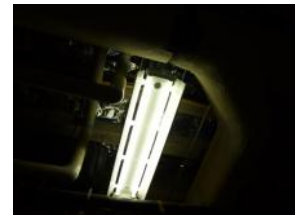


Appendix E – Building Inspection Reports

- Lavatories in main washrooms consist of porcelain, vanity type complete with manual faucets and exposed chrome plated waste piping.
 - Lunch rooms throughout the building are equipped with stainless steel kitchen sinks.
- No major deficiencies were noted in the plumbing system during the assessment.
- Fire extinguishers installed throughout the facility in accordance with NFPA 10.
- Major capital requirements:
 - Majority of plumbing fixtures are less than 10 years old and low consumption type.
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.

Fire Protection:

- Year Built:
 - 1969-1974 — Original building fire protection system.
 - 1990's — Sprinkler system added to living areas.
- Overall building fire protection system description:
 - Fire suppression for this building consists of standpipe risers and fire hose cabinets. The office areas and classrooms do not have sprinklers. However, there are sprinklers in the living areas. The sprinkler system is wet type.
 - A Siamese fire hose connection is located at the front of the building.
 - Water service with individual control box is located inside the building.
 - No fire pump exists. System relies on pressure of water service per building engineer.
- Overall building fire protection system condition:
 - No major deficiencies were noted in the fire protection system.
 - Existing automatic fire suppression system is in good condition.
- Operational issues:
 - The system was observed in a visual review only.



T-12 Fluorescent Light Fixture



Smoke Detector



Corridor Lighting



Emergency Battery Pack in Pool



T-12 Fluorescent Lamp



Workout Room Lighting



Incandescent Lighting in Auditorium



Appendix E – Building Inspection Reports

■ Major capital requirements:

- There are major capital requirements involved at this time - lack of a complete sprinkler system. Building does not meet current codes and standards. Automatic fire protection system with flow and tamper alarms is required for the building.
- Corrosion monitoring system is recommended. It can provide early warning of corrosion problems that can do irreparable harm to fire protection system if left unchecked. Establish time schedule and appropriate funds if such system is preferred.



Pool Lighting



Fire Alarm Control Panel and Splice Box



Exterior Lighting Fixture



Fire Alarm Panel



Simplex Pull Station



Fire Alarm Panel



Fire Alarm Annunciator Panel



Fire Alarm Control Panel



Computer Lab



Computer Lab Wiring



Disconnect Switch



Distribution Panel



Access Control Panel



Fire extinguisher cabinet



Old plumbing fixtures



Swimming pool not used in 10 years



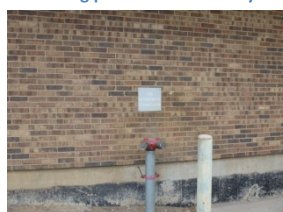
Plumbing fixture is missing



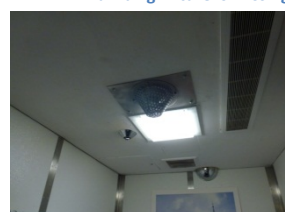
Water meter



Hot water expansion tanks



Fire Department Connection



Tamper Resistant Sprinkler Head



Concealed Type Sprinkler Head



Appendix E – Building Inspection Reports

M-01 Technology Innovation Center (ID: 5290) – 10437 Innovation Drive EUA Architects

- Asphalt parking and drive lanes are in poor shape.
- Main exterior entry stairs are in good condition, other entrances that are not used as often are in poor shape. Most entrance/exits are wood doors and deteriorating. Handrails are in need of paint and most are not HC accessible.
- Main entrance has character and curb appeal but is not handicapped accessible.
- There is only one accessible entrance on the north side of the building which is used primarily by staff.
- Wood windows are in need of replacement. Some have been updated to aluminum but most are inefficient glass and deteriorating beyond useful life.
- Window and door replacement in conjunction with mechanical upgrades can greatly improve the energy efficiency of the overall building.
- Window AC units exist throughout the building and should be removed when the windows are replaced. Adding building-wide cooling should eliminate them entirely.
- The first and second floor door handles have been upgraded to lever type in lieu of round knobs to comply with ADA (Americans with Disabilities Act). The door hardware on 1st-3rd floors consist of knobs and do not comply with current ADA.
- Multiple offices in a leased business are only connected via public corridors. While the lease makes this work it is not an ideal situation. Conference spaces are shared as well.
- This building is not readily adaptive to wide open spaces. Most walls are load bearing masonry and are not able to be removed without great expense. The individual rooms are a product of this



Parking lot in poor condition



Wood doorway to exterior worn, water damage



The main public entrance has great architectural character but is not handicapped accessible



Replace exterior wood doors with new energy efficient type



Replace exterior wood doors with new energy efficient type



Air conditioning units are common throughout the building in wood windows that are deteriorating and should be replaced with energy efficient aluminum type



Appendix E – Building Inspection Reports

building type and construction, therefore, its adaptive use should take this into consideration.

- The exterior façade based on ground level visual inspection appears to be in good shape. There are some areas that require attention like tuckpointing or caulk, but there is no evidence of major deterioration.
- The original restrooms that were built in 1915 are still in use but are aged. Upgrade of fixtures and finishes should be considered in the near future. While they remain functional, the visual impact of these facilities should be considered when attracting new tenants.
- One unisex accessible toilet room has been added to each floor to meet accessibility guidelines for HC tenants. When upgrading the original toilet rooms, accessibility should still be considered at the time of renovation.
- Overall the roof appears to be in good condition.

Priority Items to consider upgrading

1. Exterior doors and sidelights
2. Exterior windows
3. Interior restrooms
4. Public Corridor Finishes, i.e. carpet, ceiling tiles, wall paint, trim paint
5. Basement spaces that were not recently upgraded
6. See MEP for priority list



Typical restroom, not handicapped accessible



Drinking fountains non-ADA compliant – projecting hazard



A typical interior office corridor



Typical stairs, with non-ADA compliant handrails



Rolling doors are non-insulated, worn



Roof and flashing generally in good condition



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built and Major Renovations:
 - 1913 — Original building mechanical systems: steam heating and natural ventilation.
 - Addition of 4th and 5th floor: steam heating system extended to accommodate new building floors (Unable to obtain date).
 - 1950 — Truck shelter building mechanical system: suspended steam unit heaters.
 - 1977 — Remodeling for infirmary use: added 100% outdoor air handling units with steam heating and steam horizontal unit ventilators.
 - Added window air conditioners (Unable to obtain date).
 - 2003 — Partial north wing conversion to labs: added 100% outdoor air steam heating/DX cooling air handling unit, air cooled condensing unit, and dedicated roof mounted lab exhaust fan.
- Mechanical System Description:
 - Heating — Steam system consisting of steam piping, condensate return piping, steam radiators, and associated valving provide heat to the building. Building is supplied with steam through steam mains installed in underground tunnel.
 - Ventilation — Natural ventilation provides building ventilation air through the use of operable windows, space relief openings, and roof gravity ventilators, creating a stack effect in the entire building. Under 1977 remodeling, sixteen (16) power roof ventilators have been installed to provide exhaust for toilet rooms, janitor's closets, lockers, and other critical spaces (e.g. smoke rooms at the time). At the same time nine (9) 100% outdoor air handling units have been added to provide the required make-up air.
 - Air-conditioning — The majority of the existing building with the exception of the lab in the north wing is cooled with window air conditioning units.
 - Pneumatic controls - air compressor, refrigerated air dryer, and associated accessories and tubing provide controls for



Steam radiator w/ space relief opening (4th and 5th floor)



Steam radiator w/ space relief opening (original building)



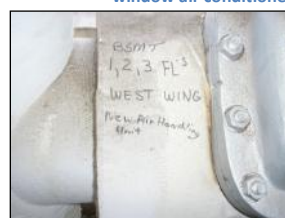
Suspended steam unit heater



Steam mains



Operable window, steam radiator, and window air conditioner



Steam main branch



Steam main branch



Appendix E – Building Inspection Reports

air handling units steam control valves and outdoor air dampers.

- Overall building mechanical system condition:
 - Systems are beyond their service life with the exception of the 2003 air handling unit, air cooled condensing unit, and roof lab exhaust fan.
- Operational issues:
 - Heating — The plant providing steam for the building is expected to be shut down when the work on the Zoo Interchange begins. At that point, the building will need to have new boiler plant.
 - Ventilation — Since the building is not totally sealed, the stack effect causes air infiltration. During the heating season, the warmer indoor air rises up through the building and escapes at the top either through open windows, ventilation openings, or other forms of leakage. The rising warm air reduces the pressure in the base of the building, drawing cold air in through either open doors, windows, or other openings and leakage. During the cooling season, the stack effect is reversed, but is typically weaker due to lower temperature differences.
 - It appears the addition of the 4th and 5th floor has eliminated the roof gravity ventilators serving the floors below. Further investigation is required to confirm it.
 - Window air conditioner extension panels cause energy loss year round.
 - Steam radiators for the most part don't have steam control valves.
- Major capital requirements:
 - Heating— option (1) provide new steam boilers and keep the existing steam system with danfoss valve (optional) at each radiator; option (2) high efficiency condensing hot water boilers and new hot water system complete with piping and hot water fin radiation/radiators/panels.
 - Ventilation — Provide new make-up air handling units supplying the corridors and spaces which don't meet the code for natural ventilation openings. Replace existing exhaust fans with new. Verify issue with missing gravity roof ventilators and provide mechanical exhaust if required.



2003 Roof lab exhaust fan



1977 power roof ventilators



Steam horizontal unit ventilator



No gravity ventilators on 5th floor roof



Gravity ventilators on lower roof



2003 air handling unit



2003 air cooled condensing unit



Appendix E – Building Inspection Reports

- Air-conditioning — provide VRF/VRV (variable refrigerant flow/volume) systems with refrigerant heat recovery.
- Building automation system — New DDC system to incorporate new equipment.

Electrical:

- Electrical system was recently replaced. No access to drawings to confirm date of installation.
- There is a 19kVA generator for emergency lighting and fire alarm systems.
- The fire alarm system by Faraday is older than 30 years and the building engineer can't find parts. It would be approximately \$3/sf to replace.
- The building access system is antiquated (more than 20 years) and the engineer can't get parts for it. The access system consists of card readers at each of three doors. There is no card reader at the entrance.
- The PA system is fairly new and works through the phone. The staff had no complaints on the PA system.
- Lighting in the existing restrooms that haven't been refurbished is quite old and should be replaced.
- Lighting on the exterior consists of at least four types of light fixtures. When the fixtures begin to fail, it is recommended that new fixtures of conforming type be installed. Light fixtures on the roof are quite old and some are missing.

Plumbing:

- Year Built and Major Renovations:
 - 1913 — Original building plumbing systems: Domestic water is supplied by Milwaukee County through the County Grounds system. Domestic water is original to



Lab supply register and exhaust grille



100% O.A. air handling unit



Pneumatic controls air compressor



Gas service



Various exterior lighting fixtures



Light fixture in vacant tenant space with rust on junction box due to leak in ceiling



Incandescent roof light fixture



Appendix E – Building Inspection Reports

the building and is substantially oversized for the current use. The system uses a large storage tank with a steam supplied shell and tube heat exchanger.

■ Plumbing System Description:

- The system consists of steam to water heat exchangers/converters with two system circulating pumps. While it is impossible to predict with certainty when the plumbing equipment will fail, hot water systems of this type typically last 20 to 25+ years. There is also an existing approximately 1000 gallon storage tank.
- There is a copper domestic water supply line to the building. The main shutoff valve is located in the basement room. There is a single water meter for a building. The domestic water piping is mixture of galvanized and copper piping. The visible waste piping is a combination of cast iron and pvc. The plumbing piping in various locations could not be evaluated due to lack of access.
- Several drinking fountains were missing in the corridors with only piping and valves indicating their original locations.

■ Overall building plumbing system condition:

- Water pressure at the fixtures was average to good. Water flowed clear at the fixtures.
- The condition of most of the fixtures is average primarily due to worn finishes. Faucets and trim are a mixture of various brands and types due to repairs made over the years.
- The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
- The system is operational, and could remain so for some time, but has exceeded its service life.

■ Operational issues:

- Existing plumbing fixtures cause energy loss year round.
- Older plumbing system may not support the pressure and waste removal requirements of modern functions.

■ Major Capital Requirements:

- The upgrades include new plumbing fixtures and a new domestic hot water system.



Existing bathroom light fixture



Missing light fixture on roof



Oversized water tank



Pipe cleanout plugs



Missing drinking fountain



Pipe clamp on existing piping, which indicates there was a leak here



Insulation removed from sprinkler pipings maller pipe has pipe clamp



Appendix E – Building Inspection Reports

- Some of the domestic water piping may be able to be reused, along with some of the drain piping. Drains should be rodded out, and new plumbing fixtures provided to respond to the proposed plan.
- Safety:
 - From a safety and efficiency perspective, these plumbing systems should be upgraded or changes should be performed in a thoughtful manner that provides required functionality.
- Summary:
 - There are no material deficiencies requiring repair or replacement at this time. Maintenance representative reports no plumbing problems. The Environmental Protection Agency (EPA) reports that just one leaky faucet can waste more than 3,100 gallons per year. Replacing existing toilets, showerheads and aerators can save as much as 25 - 40% on the water bill. Eco-friendly adjustments, such as new low flow toilet and lavatory fixture, solar hot water, and photovoltaic roof array will translate into considerable savings. Exploring some of the new grey water and solar water devices that will be transformed into sustainable green facility with the context of energy consumption, water use, waste water output, and renewable energy production.

Fire Protection:

- Year Built and Major Renovations:
 - 1977 — New building fire protection systems: The system is designed to detect, extinguish, and limit the extent of fire damage or enhance life safety.
- Fire Protection System Description:
 - The system consists of wet-pipe fire suppression sprinklers. The sprinklers in the system are attached to pipes containing pressurized water at all times. A wet-pipe system is used in the building wherever temperatures are high enough to prevent freezing.
 - No major deficiencies were noted in the fire protection system with the exception of some pipes with pipe clamps installed to repair leaks. Fire pump and piping system located in basement room B-3 of the west wing. The 50 horse power electric motor and fire pump, the small air



Fire alarm conduits, junction boxes, cable tray in corridors



Water damage



Leaky lavatory



Irrigation system?



Fire alarm annunciator panel



Leaky pipes



Appendix E – Building Inspection Reports

compressor and 2 HP jockey pump appear to be in good condition.

- Overall building fire protection system condition:
 - Due to overall simplicity, wet pipe sprinklers require the least amount of installation time in renovated areas and capital. The system is pressure tested and restored. In a few locations sprinkler protection is reinstalled by replacing the fused sprinklers and turning the water supply back on.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are no major capital requirements involved at this time. Corrosion monitoring system can provide early warning of corrosion problems that can do irreparable harm to fire protection system if left unchecked.
 - Some areas are not sprinklered and would decrease safety and increase property damage potential.
- Safety:
 - The building is bounded by fire rated doors, dampers and penetration seals.
- Summary:
 - Sprinklers are highly desirable for life safety and property protection. Existing automatic fire suppression system is in good condition and requires proper maintenance.



Appendix E – Building Inspection Reports

Marcia Coggs Human Services Center (ID: 5600) –1220 West Vilet Street.

EUA Architects

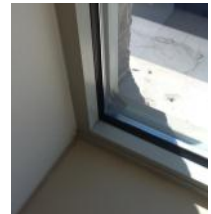
- The building houses approximately 600 people. The 1st and 2nd floors are leased by the state (these workers became state employees, stayed in the building), while the 3rd floor is county space. The basement has a food pantry and is currently used for storage, could become office space in the future.
- A majority of the 1st-3rd floors are open office space with workstations.
- The county owns the three parking lots north of the building.
- The windows do not provide effective solar control. A film was applied to the glass to remedy this, however, glass has started to crack. Blinds are often drawn over the windows, limiting the amount of daylight admitted in.
- Water has infiltrated the basement below the parking lot, causing steel beams to corrode and damage to the concrete slab. Water is also present in the basement tunnel.
- A new membrane roof was recently installed; the roof is in good condition.
- A recent fire across the street caused smoke damage to the building. Ceiling tiles were replaced, walls painted.



Basement storage area. A large amount of office furniture, workspace partitions, etc. are stored here



Typical office space with cubicles



The building's glass doesn't provide effective solar control. Some glass has cracked, this window's weather stripping has started to come loose



Basement structure with parking lot above. Water damage has caused corrosion of steel beams, deterioration of concrete slab



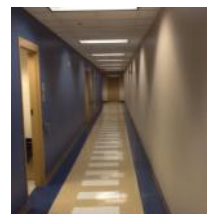
Roof recently replaced, in good condition



Typical stairwell, carpeted risers and landings in good condition



Stone deteriorating, tuck pointing needed on brick work in some spots



A typical corridor. Floor, walls and ceiling generally in good condition



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

■ Year Built:

- Original building mechanical systems.
- 1923 — Department store renovations.
- 1963 — Added eight (8) constant air volume heating/ventilation only AHUs.
- 1987 — Constant air volume systems converted to variable air volume systems (VAV boxes added).
- 2004 — partial renovation at each floor (VAV boxes replaced, finned tube radiation replaced).
- 2005 — DDC controls installation.
- Steam boilers replaced.
- Hot water boiler installation.
- Chiller, cooling tower, condenser water economizer heat exchanger installation.

■ Mechanical System Description:

- Heating — Steam system: Two (2) steam boilers, complete with boiler feed system, and associated condensate return pumps, steam supply, and condensate return piping provide steam to building air handling unit steam coils. Heating hot water system: Three (3) natural draft hot water boilers, complete with primary boiler circulating pumps and secondary distribution hot water pumps, hydronic accessories, hot water supply/return piping, and valving provide hot water to VAV box reheat coils, perimeter finned tube radiation, storage/toilet rooms convectors, and cabinet unit heaters. Heated air is delivered through ceiling mounted diffusers/registers to building spaces.
- Ventilation — Multiple VAV air handling systems consisting of built-up air handling units, complete with wall louvers, supply/return/exhaust ductwork, VAV boxes, supply/return/exhaust inlets/outlets, separate return/relief fans, and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building. Supply, and return/relief fans are equipped with variable frequency drives (VFDs).
- Air-conditioning — Indoor chiller complete with grade mounted cooling tower and associated pumps,



Finned tube radiation



Ceiling cabinet unit heater



Wall convector



Wall cabinet unit heater



Hot water boilers



Hot water boiler circulating pumps



Steam unit heater



Appendix E – Building Inspection Reports

condenser water economizer, piping, hydronic accessories, and controls generate and distribute chilled water to building air handling units. Multiple VAV air handling systems consisting of built-up air handling units, supply ductwork, VAV boxes, and supply outlets provide cooling throughout the building.

- Computer data room — room is equipped with dedicated chilled water cooling unit.
 - Humidification — Most of the building air handling units are provided with humidification control.
 - Variable frequency drives — built-up air handling systems supply and return fans have variable frequency drives.
 - Building automation system — BAS system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
- Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Hot water boilers — 20 years (100%)
 - Steam boilers — 20-25 years (100%)
 - Cooling towers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating/cooling coils — 20 years (100%)
 - Air compressors — 25 years (100%)



Built-up AHU steam heating coil



Steam boiler feed system



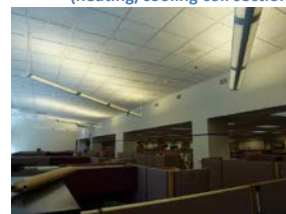
Steam boilers



Variable frequency drive



Built-up air handling unit
(heating/cooling coil section)



Sidewall supply registers



Exhaust fan



Appendix E – Building Inspection Reports

- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for gradual replacement of outdated heating equipment.
 - Ventilation — establish time schedule and appropriate funds for gradual replacement of outdated ventilation equipment.
 - Air conditioning — establish time schedule and appropriate funds for gradual replacement of outdated air conditioning equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- The existing building was built in the late 1800's with the newest part installed in 1923. The electrical switchboards and some panelboards were replaced as part of a 2008 project. The existing main switchgear has two feeds from WE Energies with a tie breaker. In the center section of the existing switchgear, there is a WE Energies owned switch that feeds the nearby Pabst Complex. The gear is in good condition as it is only 4 years old. However, there is a concern that there are steam pipes in the ceiling above the existing switchgear. Recommend installing drain pans or something similar below the steam piping to prevent any water leaking onto the switchgear. Where existing panelboards were replaced, the original panels were gutted and used as a splice box for the new panels.
- Existing elevator panel is quite old and has broken breakers. Recommend replacement of panel.



Steam wall convector



AHU-2 variable frequency drive



Existing ductwork and HVAC piping



Existing ductwork and HVAC piping



Existing exhaust fan



Return/exhaust fan



Intake/relief wall louvers



Appendix E – Building Inspection Reports

- The emergency generator was also replaced in 2008. The Kohler generator mainly handles the emergency lighting, fire alarm and the PA system. The generator is located outside the building and is in good condition. The 225Amp emergency panel was installed in 2009.
- The majority of the existing fire alarm system by Johnson Controls was replaced in 2004 with a new Simplex addressable system. The devices in the basement areas, boiler rooms and the elevator were not replaced. The Johnson Controls panel was converted into a slave panel in order to connect the existing devices to the new system. The old Johnson Controls devices that remain are not addressable. If there is an issue with a device, the problem can be narrowed down to which zone is affected, but not which particular device. Recommend replacing the Johnson Controls devices with new addressable Simplex devices. The building engineer stated that there is a request for proposal out to replace the Johnson Controls devices with Simplex devices.
- Existing security cameras appear to be in good shape and are approximately 8 years old. The cameras monitor the corridors and building exterior. The facility employs a security company and they are located in office 100A. There is a Geovision 360 degree camera in the lobby. A glass break system was installed recently, but the building engineer stated that the existing original wiring was reused. Recommend testing the wiring and replacing if necessary.
- Exit signs are approximately 8 years old and were installed as part of the 2004 building remodel project.
- Emergency battery pack lights appear to be in good shape. The majority are approximately 8 years old.
- The existing lighting consists of recessed parabolic fluorescent light fixtures. The majority of the building has T-8 lamps, but there are pockets of T-12's. The engineer stated that the fixtures were converted to T-8 lamps by replacing the ballasts and the tombstones (sockets). The engineer also stated that he stocked up on T-12's. Once those run out, they will need to convert the remaining T-12 fixtures to T-8 fixtures. Recommend replacement of all remaining T-12 fixtures in the next few years.
- The existing building lighting control system is fairly new and is in good condition. The system is by Douglas Lighting Controls and controls the lights on floors one through three. The basement lighting is operated by the eight year old TAC BAS System. Occupancy sensors are installed in most of the restrooms to control the lighting.
- Exterior building lighting is in fair condition.
- The existing PA system was installed in 2004 as part of the building remodel. The system covers 97% of the building.



Ceiling linear slot diffusers



Cooling tower



Data room air conditioning unit



Indoor chiller



Pneumatic temperature controls panel



Temperature control air compressor



DDC temperature controls panel



Appendix E – Building Inspection Reports

- There are some areas where it is difficult to hear announcements. Recommend installing speakers in areas of poor coverage.
- Data cables are run throughout the basement areas. Recommend installation of new cable tray system to organize cables better.

Plumbing:

- Year Built:
 - Original building plumbing systems.
- Plumbing System Description:
 - There is a 4" diameter copper domestic water supply line to the building. The incoming line has a backflow prevention device. The main shutoff valve is located in the basement. There is a 3" single water meter for the building. All supply piping examined is copper. The visible waste piping is cast iron and pvc.
 - Natural gas is supplied to the building by a 3" main located outside on the northeast elevation.
- Overall building plumbing system condition:
 - No major deficiencies were noted in the plumbing system during the assessment. The location of the main water line to the property was not determined.
 - The system is provided with hot water re-circulation pump and pipes.
 - There is a gas-fired domestic water heater rated at 800,000 BTU/h in the basement. The system uses a large storage tank with a capacity of 125 gallons. Water heater flues show no mineral deposits on the outside perimeter and no rust.
- Operational issues:
 - Washrooms are located on each floor of the building. Majority of plumbing fixtures are less than 10 years old and low consumption type.
 - The plumbing piping in various locations could not be evaluated due to lack of access.
- Major capital requirements:
 - Establish time schedule and appropriate funds for gradual replacement of plumbing system equipment, piping, valving and insulation that have reached the end of their service life.



Condenser water pump



Condenser water economizer



Condensate return pump



Air handling unit



Chilled water pumps



Chilled/condenser water piping (at indoor chiller)



Elevator machine room air conditioner



Appendix E – Building Inspection Reports

- Water heater flue is air tight and not well sealed to the chimney connection.
- Valves shall be easily accessible for handling.

Fire Protection:

- Year Built and Major Renovations:
 - Original building fire protection systems.
 - New building fire protection systems: The system is designed to detect, extinguish, and limit the extent of fire damage or enhance life safety.
- Fire Protection System Description:
 - The system consists of wet-pipe fire suppression sprinklers. The sprinklers in the system are attached to pipes containing pressurized water at all times. Wet-pipe system is used in the building wherever temperatures are high enough to prevent freezing.
 - No major deficiencies were noted in the fire protection system with the exception of some pipes with pipe clamps installed to repair leaks. The fire protection system includes a medium-heavy hazard wet fire sprinkler system with no fire pump.
- Overall building fire protection system condition:
 - Due to overall simplicity, wet pipe sprinklers require the least amount of installation time in renovated areas and capital. The system is pressure tested and restored. In a few locations sprinkler protection was reinstalled by replacing the fused sprinklers and turning the water supply back on.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are no major capital requirements involved at this time. Corrosion monitoring system can provide early warning of corrosion problems that can do irreparable harm to fire protection system if left unchecked.
 - Some areas are not sprinklered and would decrease safety and increase property damage potential.
- Summary:
 - Sprinklers are highly desirable for life safety and property protection. Existing automatic fire suppression system is in good condition and requires proper maintenance.



Chemical feed system



Panel Upgrade with Old Panel
Converted to Splice Box



Panel Located in Basement Should Be
Replaced



Transformer, Recommend replacement



Fire Alarm Horn and Strobe



Johnson Controls Fire Alarm Device



Fire Alarm Panels



Appendix E – Building Inspection Reports



Exterior Security Camera



Exit Sign, Security Camera and
Emergency Battery Pack Fixture



Exit Sign



Light Fixtures with T-8 Lamps



Fluorescent Strip Lighting



Parabolic Recessed Fluorescent Light
Fixture



Exterior Light Fixture



Exterior Light Fixture



Remodeled Floor Lighting



Corridor Lighting



Existing Racks in Data Room



Data Cables Running Through
Basement. Recommend Cable Tray
System



Simplex Fire Alarm NAC Panel



Emergency Generator



Main Switchgear Replaced in 2008



Electrical Distribution Switchboards
Replaced in 2008



AHU Disconnect Switch. Recommend
Replacement



Main Switchgear with Steam Piping
Overhead



Domestic hot water heater



Sewage piping



Lavatory with flush valve



Service sink



Two sump pumps



Mop basin



Appendix E – Building Inspection Reports



Fire sprinkler (downright)



Upright sprinkler head with piping



Basement is fully sprinkler protected



The sprinkler main, 6" size



Wall damaged/sprinkler line



Hand held ABC type fire extinguisher



Appendix E – Building Inspection Reports

City Campus Office Complex – 9 Story (ID: 5605) – 2711 West Wells Street EUA Architects

- Various components of the building's exterior are in poor shape. Steel beams over the first floor driveway are heavily rusted, concrete on the façade is spalling, stone panels are damaged, and the glass storefront to the main entrance is beyond its useful life.
- The 6th floor has been vacant for more than a decade and is in very poor condition. It is currently used to store office furniture, equipment, etc.
- The floor plan layout is inefficient for an office space. Individual offices with bathrooms, long corridors, and underutilized spaces exist on each floor.
- Some floors contain a number of vacant rooms.



Steel beams rusting significantly on exterior



Stone panels cracked, bottom row on Wells St. sidewalk shifting from water damage, wear and tear



Storefront entrance beyond useful life, sidewalk is worn



Corridor in the vacant 6th floor. Office furniture, equipment, etc. stored throughout the floor



Typical office with individual bathrooms, non-ADA compliant hardware



Driveway to main entrance, no separate handicap ramp or railings



Typical public restroom on office floors



Stairwell with non-compliant railings and door hardware



Interior room used as storage space



Typical corridor on office floors



Roof generally in good condition



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - 1963 —Original building mechanical systems basement through 4th floor.
 - 1964 —Partial revisions throughout the building. Electric steam boiler for sterilizer room installation.
 - 1966 —Original building mechanical systems 5th through 9th floor design.
 - 1991 — Tower – Sub-basement and 9th floor penthouse chillers replacement. Cooling towers have been refurbished. Air handling units have been refurbished and AHU cooling coils have been replaced. First through 6th floor renovations. All HVAC pumps have been refurbished.
 - 1994 — Tower – First floor partial renovation.
- Mechanical System Description:
 - Heating —Total of three (3) hot water boilers (two 5980 MBH, installed around 1963, and one 7490 MBH, installed around 1966 generate heating hot water for the building. Heating hot water system consisting of hot water pumps, hydronic accessories, supply/return piping, valving, and controls distribute heating hot water to building induction units hydronic coils, constant volume box reheat coils, and building multiple air handling units heating coils. Existing steam system appeared to be no longer in use.
 - Ventilation — Multiple central station air handling units (0.5 through 40 HP supply fan electric motors) with separate return/relief/exhaust fans complete with intake/relief wall louvers/hoods, dual duct mixing boxes, supply/return/exhaust ductwork, supply/return/exhaust inlets/outlets, and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — Total of three (3) chillers complete with associated pumps, hydronic accessories, piping, valving, and controls generate chilled water for the building. First chiller (280 tons, installed 1991) is located



HW pumps (5th floor penthouse)



Hot water pumps (basement)



Hot water boiler (subbasement)



Hot water boiler (subbasement)



AHU heating coil section (basement)



AHU supply fan section (9th floor penth.)



Induction unit



Appendix E – Building Inspection Reports

in the subbasement. Second chiller (264 tons installed 1991) is located in the 9th floor penthouse. Heat from both chillers is rejected by roof mounted cooling towers. The third reciprocating chiller (100 tons, installed around 1965 is located in the 5th floor penthouse mechanical room with the air cooled condenser located on the 5th story building roof. Chilled water system consisting of chilled water pumps, chilled water supply/return piping, hydronic accessories, valving, and controls distribute chilled water to building air handling unit cooling coils and induction units hydronic coils.

- Humidification — Building air handling units are provided with humidification control.
- Building automation system — Building temperature control system is a combination of DDC, pneumatic controls, and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Heat exchangers — 20 years (100%)
 - Chillers — 20 years (100%)
 - Cooling towers — 20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating/cooling coils — 20 years (100%)
 - Air compressors — 25 years (100%)
- Operational issues:
 - Heating
 - Most of the steam traps are leaking.
 - Ventilation



Dual duct mixing box



Temperature controls air compressor



Air handling unit (5th floor penthouse)



Air handling unit



Temperature controls air compressor



AHU supply fan section (basement)



Air handling unit (3rd floor mech room)



Appendix E – Building Inspection Reports

- No major issues.
- Air conditioning
 - No major issues.
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for replacement of outdated heating system and equipment.
 - Ventilation — establish time schedule and appropriate funds for replacement of outdated ventilation system and equipment.
 - Air conditioning — establish time schedule and appropriate funds for replacement of outdated air conditioning system and equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- The existing building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building). The first 4 floors of the 9-story building were built in 1964. In 1973, 5 floors were added to the 1964 building in addition to the 5-story building. The Tower Theatre and 2-story retail building were acquired in 1975. The Tower Theatre was built in 1929.
- The electrical substations USS/1 (Room B43) and USS/2 are original to the 1964 building and were originally both located in the basement. USS/1 fed the majority of the 1964 building, which is now the 9-story building. The USS/2 substation is now located on the 10th floor (penthouse) of the 9-story building and feeds the 5-story building. USS/1 and USS/2 substations each have a 13.2 kV feed from WE Energies which transforms to 120/208V. The substations are 48 years old at this point. A third substation USS/3 (located in Room B46) was installed in 1991 per as-built drawings. USS/3 also has a 13.2kV feed from the utility. Per the 1991 drawings, the incoming primary incoming service (PIS)



Air handling unit (5th floor mech room)



Chiller (9th floor penthouse)



Cooling towers



Chilled water pumps (9th floor penthouse)



Air cooled condenser (5th floor roof)



Chiller (5th floor penthouse)



Chilled/condenser water pumps



Appendix E – Building Inspection Reports

equipment located in Room B02A in the basement was replaced. It was observed that the pipes in this room were rusted. Recommend replacement of substations USS/1 and USS/2.

- The majority of the existing Federal Pacific and Cutler Hammer branch panelboards are original to the building. Recommend replacement of all panels from 1964 up to 1991. Panels from 1991 are 21 years old and are in good condition.
- There are two existing emergency generators. The 350kW Cummins generator is original and was refurbished in 1991. The 250kW diesel generator located in Room 142 at grade level between the 5 and 9-story buildings is original as well. The 800Amp emergency panel EDP located in room B43 is normally fed from USS/1 with an emergency feed from the 250kW generator. The 1600Amp emergency distribution panel P/EDP located in the 9-story building penthouse is normally fed from USS/2 with an emergency feed from the 350kW generator. The transfer switches for each of the emergency panels are also original to the building. As the 5 and 9-story buildings were used as a hospital, the need for large capacity generators was clear. Now that the buildings are used mostly for office space, it is recommended that the emergency system for the buildings be replaced with something that is more suitable for an office.
- The existing fire alarm system was installed in 1991 per the as-built drawings dated 2/28/1992. The fire alarm system is by Cerberus Pyrotronics. Recommend replacing the 21 year old system with a new addressable system.
- Existing security cameras appear to be in good shape. Unable to verify age of devices.
- Exit signs are approximately 21 years old per the as-built drawings dated 2/28/1992. The exit signs on the 3rd floor were replaced recently due to water damage on that floor.
- The existing lighting consists of recessed fluorescent light fixtures which were installed as part of the 1991 upgrades. The majority of the building has T-12 lamps, but there are pockets of T-8's on the 3rd floor. The engineer also stated that he stocked up on both T-8's and T-12's. Recommend replacement of all remaining T-12 fixtures in the next few years. Recommend replacement of lighting with energy efficient lighting.
- The existing PA system is original to the building. The building engineer stated that there are no issues with it and it is used all of the time, especially when it was a hospital.
- There is no lightning protection for the building installed on the roof.
- There is a light switch and conduit located in the sub-basement, in the boiler room, which are heavily corroded, to the point that the wires are



Water chiller (subbasement)



AHU cooling coil section (basement)



Chilled water pump (5th floor mechanical room)



Substation USS/2



Substation USS/2



Substation USS/3 Installed 1991



Substation USS/3 Installed 1991



Appendix E – Building Inspection Reports

visible. Recommend replacement of the switch and associated conduit and wiring.

Plumbing:

- Year Built: The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building).
 - 1929 —The Tower Theatre was built. Original building plumbing system.
 - 1975 —Theatre and 2-story retail building were acquired.
 - 1964 —The first 4 floors of the 9-story building were built.
 - 1973 —5 floors were added to the 9-story building in addition to the 5-story building.
- Plumbing System Description:
 - Domestic water is original to the building. The system consists of a pair of 1000 MBH hot water boilers for domestic water with a large storage tank. Gas-fired hot water heater “AERCO” serves kitchen area.
 - The 4” domestic water service enters in the mechanical room. The mechanical room is located on the basement in the nine-story building. A package with dual base-mounted 7.5 horsepower pumps elevate water pressure and flow demand required of their plumbing fixtures and plumbing equipment.
 - Domestic water piping in the building appears to be a mix of black steel, galvanized and copper piping. Generally, the piping appeared to be old and in fair condition for its age with observed leaks. Due to the age of the building, asbestos material contained throughout the piping for plumbing and heating systems.
 - Soil, waste and vent piping consist of cast iron piping. Most cast iron piping that could be observed appeared to be in fair condition for its age with no apparent leaks.
 - The gas service enters the side of the building with the meter located outside the main building entry to the mechanical room. All piping is black steel with welded



Substation USS/1 Installed 1964



Emergency Distribution Panel P/EDP in penthouse



Fire Alarm Annunciator Panel



Generator Monitoring Panel



Panel B/G. Recommend Replacement



Existing 350 kW Emergency Generator



Original 250kW Backup Generator



Appendix E – Building Inspection Reports

and threaded joints. The gas piping appears to be in good condition.

- Overall building plumbing system condition:
 - All main risers are galvanized. For supply lines and smaller drain lines galvanized pipe was used. These pipes rust and corrode over time, leading to low pressure and leaks. Existing plumbing equipment, piping hangers, supports, valves, pumps, and gas piping are original and appeared to be in fair condition.
 - The majority of plumbing fixtures and related trim in the building appears to be in fair to poor condition and in general need of major replacement. Typical restroom consists of wall mounted toilets and sinks with the men's public restrooms containing floor-mounted and wall mounted urinals.
 - The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
 - The type of piping installed at all areas is not indicated. Temperature mixing valves are not installed.
 - Drinking fountains are at the end of their useful life and potentially critical.
- Operational issues:
 - Existing plumbing fixtures cause energy loss year round. Provide new auto-flush valves at new ADA water closet. Plumbing piping shall be insulated and heat traced.
 - Older plumbing system may not support the pressure and waste removal requirements of modern functions.
 - Provide temperature mixing valves.
 - Install shut-off valves at water supply to fixtures.
- Major capital requirements:
 - The overall condition of plumbing systems is not good. All valves need adjustment, O-ring and packing replacement, gasket replacement, filter changes, and gate, globe and seat replacements to prevent leaks.
 - Older fixtures do not have the flow characteristics of newer ones. Older fixtures are likely to have higher flow rates while newer fixtures can save a great deal of water – as much as 50%.



Fire Alarm Pull Station on 6th Floor



Fire Alarm Key Operated Pull Station



Exterior Security Camera



Recessed Fluorescent Light Fixture and Exit Sign



Exit Sign, Surface Mounted Fluorescent Fixture on Fourth Floor



Generator Battery Float Charger



ATS-1 in Room 142 for 250kW Generator



Appendix E – Building Inspection Reports

- Provide new reduced-pressure backflow preventers with upstream and downstream shutoffs and test fittings to protect potable water in continuous-pressure conditions and against high hazard contaminations.

Fire Protection:

- Year Built: The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building).
 - 1929 —The Tower Theatre was built.
 - 1975 —Theatre and 2-story retail building were acquired.
 - 1964 — The first 4 floors of the 9-story building were built.
 - 1973 — 5 floors were added to the 9-story building in addition to the 5-story building.
 - 1991 —Original building fire protection system.
- Fire Protection System Description:
 - There are major deficiencies noted in the fire protection system. It is in poor condition with numerous areas of apparent past leakages. Fire pump and piping system located at the basement level. The 30 horsepower electric motor and fire pump, the small air compressor and 1 HP jockey pump appear to be in fair condition.
- Overall building fire protection system condition:
 - The complete fire suppression sprinkler system has 6" size water service with individual control box outside the building. The sprinkler main is complete with alarmed flow station and tamper switches.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are major capital requirements involved at this time. Valves and piping are covered with oxidation, corrosion and evidence of motor oil leakage.
 - Corrosion monitoring system can provide early warning of corrosion problems that can do irreparable harm to fire protection system if left unchecked.



Corrosion on WE Energies Switchgear



Heat Trace Connection and Existing Smoke Detector



Master Clock Panel



WE Energies Switchgear



Elevator Machine Room with Original Equipment



WE Energies Switchgear

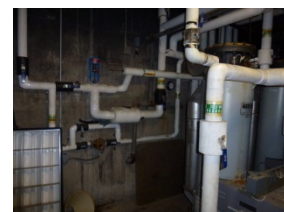


Plumbing piping



Appendix E – Building Inspection Reports

- Safety:
 - The building is not bounded by fire rated doors, dampers and penetration seals.
- Summary:
 - Sprinklers are highly desirable for life safety and property protection. Existing automatic fire suppression system is in fair condition and requires proper maintenance.
 - No backflow prevention was observed.



Gas-fired domestic water heater



Hot water boilers for domestic water



Lavatory & water closet in bathroom



Missing floor drain



Drinking fountain



Fire pump



Fire protection piping



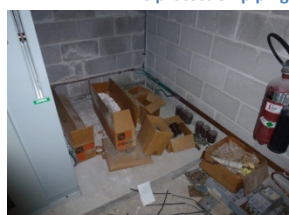
Fire protection system



Fire protection valves/temper switches



Incoming fire protection service



Fire extinguisher



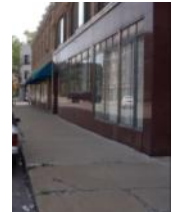
Appendix E – Building Inspection Reports

City Campus Office Complex – 5 Story (ID: 5605) – 2711 West Wells Street EUA Architects

- The membrane roof has numerous patches and isn't adhered everywhere. Damage to the insulation below has occurred.
- Stone cladding on Wells St. is cracking, has shifted from water damage, wear and tear.
- As in the 9 story building, the floor plan layout is inefficient for an office space. Many individual offices, long corridors, and underutilized spaces exist on each floor.
- Corridor carpets and finishes are generally in fair condition, new carpet has been recently installed in a few areas.
- Most door hardware is non-ADA compliant, bathrooms are not fully ADA compliant.



The roof membrane is patched in many spots, is not adhered everywhere. There is also damage to the roof insulation underneath



Stone panels cracked, shifting from water damage, wear and tear. The sidewalk is also damaged



Parapet stone needs cleaning



Appendix E – Building Inspection Reports

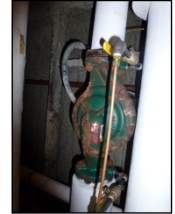
Singh Associates

Mechanical:

- Year Built:
 - Original building systems.
 - 1965 — 5th floor penthouse chiller (90 tons)/cooling tower installation. Basement, 1st floor, and 4th floor penthouse air handling unit installations.
 - 1968 — First through fifth floor renovation. Air handling unit installation.
 - 1991 — Fifth floor penthouse chiller replacement. Steam boilers installation.
 - 1991 — First through fifth floor renovation.
 - 1991 — All HVAC pumps have been refurbished.
- Mechanical System Description:
 - Heating — Adjacent 9-story building heating hot water system consisting of hot water pumps, hydronic accessories, supply/return piping, valving, and controls distribute heating hot water to 5-story building constant volume box reheat coils, perimeter finned tube radiation and building air handling units heating coils.
 - Ventilation — Two central station air handling units (20 and 30 HP supply fan electric motors) with separate return/relief/exhaust fans complete with intake/relief wall louvers/hoods, constant volume reheat boxes, supply/return/exhaust ductwork, supply/return/exhaust inlets/outlets, and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — Adjacent 9-story building chilled water system consisting of chilled water pumps, chilled water supply/return piping, hydronic accessories, valving, and controls distribute chilled water to 5-story building air handling unit cooling coils providing cooling for the building.
 - Humidification — Building air handling units are provided with humidification control.
 - Building automation system — Building temperature control system is a combination of DDC, pneumatic controls, and electro-mechanical controls.



Finned tube radiation



Heating coil booster pump



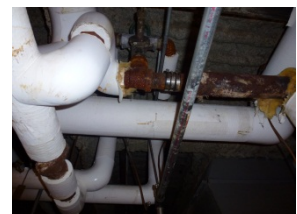
AHU-4 heating/cooling coil/filter sections



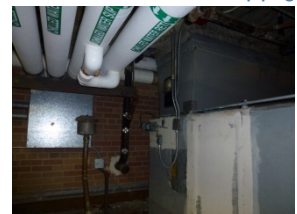
Suspended unit heater



Air handling unit AHU-4



HVAC piping



HVAC piping/outdoor air intake duct



Appendix E – Building Inspection Reports

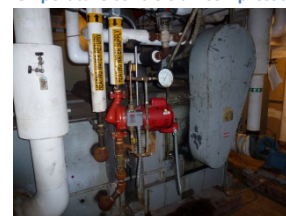
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Indoor air handling units — 20 years (100%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)
 - Heating/cooling coils — 20 years (100%)
 - Air compressors — 25 years (100%)
- Operational issues:
 - Heating
 - Most of the steam traps are leaking.
 - Ventilation
 - No major issues.
 - Air conditioning
 - No major issues.
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for replacement of outdated heating system and equipment.
 - Ventilation — establish time schedule and appropriate funds for replacement of outdated ventilation system and equipment.



Outdoor air intake hood



Temperature controls air compressor



Air handling unit AHU-5



Air handling unit AHU-5



Cooling coil pump



Substation USS/2



Generator Disconnect



Appendix E – Building Inspection Reports

- Air conditioning — establish time schedule and appropriate funds for replacement of outdated air conditioning system and equipment.
- Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- The existing building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building). The first 4 floors of the 9-story building were built in 1964. In 1973, 5 floors were added to the 1964 building in addition to the 5-story building. The Tower Theatre and 2-story retail building were acquired in 1975. The Tower Theatre was built in 1929.
- The electrical substations USS/1 (Room B43) and USS/2 are original to the 1964 building and were originally both located in the basement. USS/1 fed the majority of the 1964 building, which is now the 9-story building. The USS/2 substation is now located on the 10th floor (penthouse) of the 9-story building and feeds the 5-story building. USS/1 and USS/2 substations each have a 13.2 kV feed from WE Energies which transforms to 120/208V. The substations are 48 years old at this point. A third substation USS/3 (located in Room B46) was installed in 1991 per as-built drawings. USS/3 also has a 13.2kV feed from the utility. Per the 1991 drawings, the primary incoming service (PIS) equipment located in Room B02A in the basement was replaced. It was observed that the pipes in this room were rusted. Recommend replacement of substations USS/1 and USS/2.
- The majority of the existing Federal Pacific and Cutler Hammer branch panelboards are original to the building. Recommend replacement of all panels from 1964 up to 1991. Panels from 1991 are 21 years old and are in good condition.
- There are two existing emergency generators. The 350kW Cummins generator is original and was refurbished in 1991. The 250kW diesel generator located in Room 142 at grade level between the 5 and 9-story buildings is original as well. The 800Amp emergency panel EDP located in room B43 is normally fed from USS/1 with an emergency feed from the 250kW generator. The 1600Amp emergency distribution panel P/EDP located in the 9-story building penthouse is normally fed from USS/2 with an emergency feed from the 350kW generator. The transfer switches for each of the emergency panels are also original to the building. As the 5 and 9-story buildings were



Substation USS/2



Substation USS/1 Installed in 1964



Substation USS/3 Installed 1991



Substation USS/3 Installed 1991



Emergency Transfer Switch ATS/2



Emergency Distribution Panel P/EDP in penthouse



Emergency Panel. Recommend Replacement



Appendix E – Building Inspection Reports

used as a hospital, the need for large capacity generators was clear. Now that the buildings are used mostly for office space, it is recommended that the emergency system for the buildings be replaced with something that is more suitable for an office.

- The existing fire alarm system was installed in 1991 per the as-built drawings dated 2/28/1992. The fire alarm system is by Cerberus Pyrotronics. Recommend replacing the 21 year old system with a new addressable system.
- Existing security cameras appear to be in good shape. Unable to verify age of devices.
- Exit signs are approximately 21 years old per the as-built drawings dated 2/28/1992. The exit signs on the 3rd floor were replaced recently due to water damage on that floor.
- The existing lighting consists of recessed fluorescent light fixtures which were installed as part of the 1991 upgrades. The majority of the building has T-12 lamps, but there are pockets of T-8's on the 3rd floor. The engineer also stated that he stocked up on both T-8's and T-12's. Recommend replacement of all remaining T-12 fixtures in the next few years.
- The existing PA system is original to the building. The building engineer stated that there are no issues with it and it is used all of the time, especially when it was a hospital.
- There is no lightning protection for the building installed on the roof.

Plumbing:

- Year Built: The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building).
 - 1929 —The Tower Theatre was built.
 - 1975 —Theatre and 2-story retail building were acquired. Original building plumbing system.
 - 1964 —The first 4 floors of the 9-story building were built.
 - 1973 —5 floors were added to the 9-story building in addition to the 5-story building.
- Plumbing System Description:
 - Domestic water is original to the building. The system consists of a pair of 1000 MBH hot water boilers with a large storage tank. Gas-fired hot water heater "AERCO" serves kitchen area.
 - The 4" domestic water service enters in the mechanical room. The mechanical room is located on the fourth



Federal Pacific Branch Panel



Panel SB/PC



350 kW Emergency Generator



Generator Battery Float Charger



Fire Alarm Key Operated Pull Station



Recessed Fluorescent Light Fixture and Exit Sign



Fire Alarm Strob/Horn and Clock



Appendix E – Building Inspection Reports

floor of the nine-story building. A package with dual base-mounted 7.5 horse power pumps elevates water pressure and flow demand required of their plumbing fixtures and plumbing equipment.

- Domestic water piping in the building appears to be a mix of black steel, galvanized and copper piping. Generally, the piping appeared to be old and in fair condition for its age with observed leaks. Due to the age of the building, asbestos material is contained throughout the piping for plumbing and heating systems.
 - Soil, waste and vent piping consists of cast iron piping. Most cast iron piping that could be observed appeared to be in fair condition for its age with no apparent leaks.
 - The gas service enters the building with the meter located outside the main building entry to the mechanical room. All piping is black steel with welded and threaded joints. The gas piping appears to be in good condition.
- Overall building plumbing system condition:
- All main risers are galvanized. For supply lines and smaller drain lines, galvanized pipe is used. Pipes can rust and corrode over time, leading to low pressure and leaks. Existing plumbing equipment, piping hangers, supports, valves, pumps, and gas piping are original and appeared to be in fair condition.
 - The majority of plumbing fixtures and related trim in the building appears to be in fair to poor condition and in general need of major replacement. Typical restroom consists of wall mounted toilets and sinks with the men's public restrooms containing floor-mounted and wall mounted urinals.
 - The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
 - The type of piping installed at all areas is not indicated. Temperature mixing valves are not installed.
 - Drinking fountains are at the end of useful life and potentially critical.



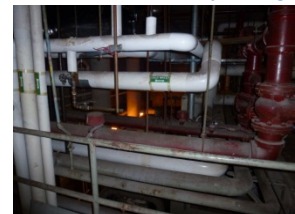
Corroded Conduit Above Piping in Basement Boiler Room



Corroded Conduit on Roof



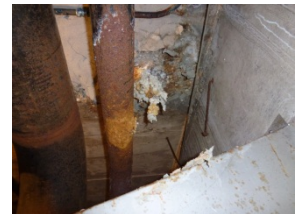
Gas fired water heaters for 5-story and 9-story buildings



Plumbing cold water piping



Natural gas service/gas piping



Corroded pipes



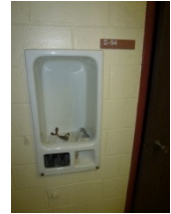
Electric water cooler



Appendix E – Building Inspection Reports

■ Operational issues:

- Existing plumbing fixtures cause energy loss year round. Provide new auto-flush valves at new ADA water closet. Plumbing piping shall be insulated and heat traced.
- Older plumbing system may not support the pressure and waste removal requirements of modern functions.
- Provide temperature mixing valves.
- Install shut-off valves for every water supply to fixtures.



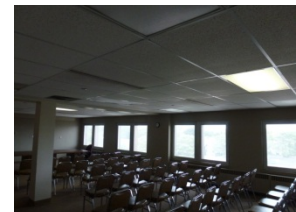
Abandoned drinking fountain

■ Major capital requirements:

- The overall condition of plumbing systems is not good. All valves need adjustment, O-ring and packing replacement, gasket replacement, filter changes, and gate, globe and seat replacements to prevent leaks.
- Older fixtures do not have the flow characteristics of newer ones. Older fixtures are likely to have higher flow rates while newer fixtures can save a great deal of water – as much as 50%.
- Provide new reduced-pressure backflow preventers with upstream and downstream shutoffs and test fittings to protect potable water in continuous-pressure conditions and against high hazard contaminations.



Pipe leakage



Concealed sprinkler heads



Downright sprinkler heads



Fire water pipes with sprinkler heads



Upright sprinkler heads



Fire protection: Wet pipe riser

Fire Protection:

- Year Built: The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building).

- 1929 —The Tower Theatre was built.
- 1975 —Theatre and 2-story retail building were acquired.
- 1964 —The first 4 floors of the 9-story building were built.
- 1973 —5 floors were added to the 9-story building in addition to the 5-story building.
- 1991 —Original building fire protection system.

■ Fire Protection System Description:

- There are major deficiencies in the fire protection system. It is in poor condition with numerous areas of apparent past leakages. Fire pump and piping system located at the basement level. The 30 horse power



Appendix E – Building Inspection Reports

electric motor and fire pump, the small air compressor and 1 HP jockey pump appear to be in fair condition.

- Overall building fire protection system condition:
 - The complete fire suppression sprinkler system has 6" water service with individual control box outside the building. The sprinkler main is complete with alarmed flow station and tamper switches.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are major capital requirements involved at this time. Valves and piping are covered with oxidation, corrosion and evidence of motor oil leakage.
 - Corrosion monitoring system can provide early warning of corrosion problems that can do irreparable harm to the fire protection system if left unchecked.
- Safety:
 - The building is not bounded by fire rated doors, dampers and penetration seals.
- Summary:
 - Sprinklers are highly desirable for life safety and property protection. Existing automatic fire suppression system is in fair condition and requires proper maintenance.
 - No backflow prevention was observed.



Appendix E – Building Inspection Reports

City Campus 27th Street Store Front (ID: 5605)

EUA Architects

- Some of the tenant space along the first floor and all of the second floor is vacant.
- The second floor hallway and rooms suffer from a lack of maintenance or repair. Floors, walls, and ceilings are in poor condition.
- The second floor wood windows are in poor condition, some are missing glass.
- The exterior brickwork and parapet need cleaning.



Typical storefront door on 27th street in vacant space. The floor is in poor condition, door does not have panic hardware



Floors, walls, ceilings, and windows in many of the 2nd floor rooms are in poor condition



Crown molding, plaster ceiling details still intact in main corridor between storefront and theater



Restroom, not fully accessible



Appendix E – Building Inspection Reports

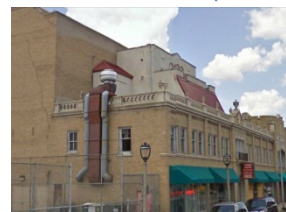
Singh Associates

Mechanical:

- Year Built:
 - Original building mechanical systems.
 - Rooftop unit installation.
- Mechanical System Description:
 - Heating — Retail spaces are supplied with steam from City Campus complex steam boiler plant. Steam system consisting of steam piping, condensate return piping, and associated valving and accessories provide heat to terminal heating units (cast iron radiators, convectors). Assume gas fired rooftop units provide additional heat to the respective spaces.
 - Ventilation — Rooftop units and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the retail spaces.
 - Air-conditioning — DX cooling rooftop units provide cooling for the retail spaces.
 - Building automation system — Temperature control system consists of standalone electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - Rooftop units — 15 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)
 - HVAC piping & fittings — 20 years (40%)
 - HVAC valves — 15 years (50%)
 - Exhaust fans — 20 years (100%)
 - Finned tube elements — 35 years (100%)



Cast iron radiator (2nd floor)



Exterior ductwork/kitchen exhaust fan



Rooftop unit/exhaust fan



Rooftop units



Substation USS/2



Fire Alarm Pull Station



Exterior Canopy Light Fixture



Appendix E – Building Inspection Reports

- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for replacement of outdated heating system and equipment.
 - Ventilation — establish time schedule and appropriate funds for replacement of outdated ventilation system and equipment.
 - Air conditioning — establish time schedule and appropriate funds for replacement of outdated air conditioning system and equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.



Existing Exterior of 2-Story Store Front



Two-compartment sink in pantry



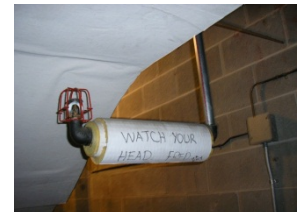
Wall mounted water closet



Lavatory



Fire pipe with tamper switch



Upright sprinkler head with cover protection



Hose connection

Electrical:

- The existing building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building). The first 4 floors of the 9-story building were built in 1964. In 1973, 5 floors were added to the 1964 building in addition to the 5-story building. The Tower Theatre and 2-story retail building (store front) were acquired in 1975. The Tower Theatre was built in 1929.
- The electrical substations USS/1 (Room B43) and USS/2 are original to the 1964 building and were originally both located in the basement. USS/1 fed the majority of the 1964 building, which is now the 9-story building. The USS/2 substation is now located on the 10th floor (penthouse) of the 9-story building and feeds the 5-story building. USS/1 and USS/2 substations each have a 13.2 kV feed from WE Energies which transforms to 120/208V. The substations are 48 years old at this point. A third substation USS/3 (located in Room B46) was installed in 1991 per as-built drawings. USS/3 also has a 13.2kV feed from the utility. Per the



Appendix E – Building Inspection Reports

1991 drawings, the incoming primary incoming service (PIS) equipment located in Room B02A in the basement was replaced. It was observed that the pipes in this room were rusted. Recommend replacement of substations USS/1 and USS/2.

- The majority of the existing Federal Pacific and Cutler Hammer branch panelboards are original to the building. Recommend replacement of all panels from 1964 up to 1991. Panels from 1991 are 21 years old and are in good condition.
- The existing fire alarm system was installed in 1991 per the as-built drawings dated 2/28/1992. The fire alarm system is by Cerberus Pyrotronics. Recommend replacing the 21 year old system with a new addressable system.
- Exit signs are approximately 21 years old per the as-built drawings dated 2/28/1992.
- The existing lighting consists of recessed fluorescent light fixtures which were installed as part of the 1991 upgrades. The majority of the building has T-12 lamps. Recommend replacement in the next few years.
- There is no lightning protection for the building installed on the roof.
- Existing exterior lighting fixtures appear to be original and should be replaced with new energy efficient fixtures.

Plumbing:

- Year Built: The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building).
 - 1929 —The Tower Theatre was built. Original building plumbing system.
 - 1964 —The first 4 floors of the 9-story building were built.
 - 1973 —5 floors were added to the 9-story building in addition to the 5-story building.
 - 1975 —Theatre and 2-story retail building were acquired.
- Plumbing System Description:
 - Domestic water is original to the building. The system consists of a pair of 1000 MBH hot water boilers with a large storage tank.
 - The 4" domestic water service enters in the mechanical room. The mechanical room is located on the fourth floor in nine-story building. A package with dual base-



Appendix E – Building Inspection Reports

mounted 7.5 horsepower pumps elevates water pressure and flow demand required of their plumbing fixtures and plumbing equipment.

- Domestic water piping in the building appears to be a mix of black steel, galvanized and copper piping. Generally, the piping appeared to be old and in fair condition for its age with observed leaks. Due to the age of the building, asbestos material is contained throughout the piping for plumbing and heating systems.
 - Soil, waste and vent piping consists of cast iron piping. Most cast iron piping that could be observed appeared to be in fair condition for its age with no apparent leaks.
 - The gas service enters the building with the meter located outside the main building entry to the mechanical room. All piping is black steel with welded and threaded joints. The gas piping appears to be in good condition.
- Overall building plumbing system condition:
- All main risers are galvanized. For supply lines and smaller drain lines galvanized pipe was used. This pipe can rust and corrode over time, leading to low pressure and leaks. Existing plumbing equipment, piping hangers, supports, valves, pumps, gas piping are original and appeared to be in fair condition.
 - The majority of plumbing fixtures and related trim in the building appears to be in fair to poor condition and in general need of major replacement. Typical restroom consists of wall mounted toilets and sinks with the men's public restrooms containing floor-mounted and wall mounted urinals.
 - The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
 - The type of piping installed at all areas is not indicated. Temperature mixing valves are not installed.
 - Drinking fountains are end of useful life and potentially critical.



Appendix E – Building Inspection Reports

- Operational issues:
 - Existing plumbing fixtures cause energy loss year round. Provide new auto-flush valves at new ADA water closet. Plumbing piping shall be insulated and heat traced.
 - Older plumbing system may not support the pressure and waste removal requirements of modern functions.
 - Provide temperature mixing valves.
 - Install shut-off valves for every water supply to fixtures.
- Major capital requirements:
 - The overall condition of plumbing systems is good. All valves need adjustment, O-ring and packing replacement, gasket replacement, filter changes, and gate, globe and seat replacements to prevent leaks.
 - Older fixtures do not have the flow characteristics of newer ones. Older fixtures are likely to have higher flow rates while newer fixtures can save a great deal of water – as much as 50%.
 - Provide new reduced-pressure backflow preventers with upstream and downstream shutoffs and test fittings to protect potable water in continuous-pressure conditions and against high hazard contaminations.

Fire Protection:

- Year Built: The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building).
 - 1929 —The Tower Theatre was built.
 - 1975 —Theatre and 2-story retail building were acquired.
 - 1964 —The first 4 floors of the 9-story building were built.
 - 1973 —5 floors were added to the 9-story building in addition to the 5-story building.
 - 1991 —Original building fire protection system.
- Fire Protection System Description:
 - Major deficiencies were noted in the fire protection system. It is in poor condition with numerous areas of apparent past leakages. Fire pump and piping system are located at the basement level. The 30 horse power



Appendix E – Building Inspection Reports

electric motor and fire pump, the small air compressor and 1 HP jockey pump appear to be in fair condition.

- Overall building fire protection system condition:
 - The complete fire suppression sprinkler system has 6" water service with individual control box outside the building. The sprinkler main is complete with alarmed flow station and tamper switches.
- Operational issues:
 - The system was observed in a visual review only.
- Major Capital Requirements:
 - There are major capital requirements involved at this time. Valves and piping are covered with oxidation, corrosion and evidence of motor oil leakage.
 - Corrosion monitoring system can provide early warning of corrosion problems that can do irreparable harm to fire protection system if left unchecked.
- Safety:
 - The building is not bounded by fire rated doors, dampers and penetration seals.
- Summary:
 - Sprinklers are highly desirable for life safety and property protection. Existing automatic fire suppression system is in fair condition and requires proper maintenance.
 - No backflow prevention was observed.



Appendix E – Building Inspection Reports

City Campus Theater (ID: 5605)

EUA Architects

- The theater and main lobby are unoccupied and in extremely poor condition from lack of maintenance or repair.
- Interior air quality is poor due to the condition of the building.
- Part of the building has been converted to a gym and storage spaces.
- HVAC air handling unit and ductwork occupy part of the theater seating area.



Main stairway in theater lobby. The lack of maintenance and repair has left the theater in poor condition



The former theater stage area has been turned into a gym



Theater seating. HVAC ductwork serving the gym currently occupies part of the seating area



Restrooms in the theater. Peeling paint could contain lead



Appendix E – Building Inspection Reports

Singh Associates

Mechanical:

- Year Built:
 - Original building mechanical systems.
 - 1991 — Air handling unit/condensing unit system installation.
- Mechanical System Description:
 - Heating — Theater is supplied with steam from City Campus complex steam boiler plant. Steam system consisting of steam piping, condensate return piping, condensate return pumps, and associated valving and accessories provides heat to theater air handling unit steam heating coils and various terminal heating units (cast iron radiators, convectors, suspended unit heaters).
 - Ventilation — One central station air handling unit (10 HP supply fan electric motor) complete with intake wall louver, relief hoods, supply/return/exhaust ductwork, supply/return/ exhaust inlets/outlets, and dedicated exhaust fans provide supply, return, and exhaust ventilation throughout the building.
 - Air-conditioning — 30 tons air cooled condensing unit with matching DX cooling coil and associated refrigerant piping, valving and controls provide cooling for the theater.
 - Humidification — Air handling unit is provided with humidification control.
 - Building automation system — Building temperature control system is a combination of pneumatic controls and electro-mechanical controls.
- Overall building mechanical system condition:
 - Most of the HVAC systems are at the end or beyond their service life. The following is a typical mechanical system/equipment service life with percent replaced in parentheses:
 - HVAC pumps — 15-20 years (100%)
 - Air cooled condensing units — 15 years (100%)
 - Piping/equipment insulation — 15 years (75-100%)



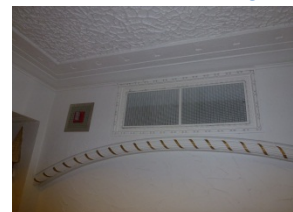
Cast iron radiator



Cabinet unit heater



Air handling unit



Air inlet/outlet



HVAC piping



Air cooled condensing unit and wall louver



Substation USS/3 Installed 1991



Appendix E – Building Inspection Reports

- HVAC piping & fittings — 20 years (40%)
- HVAC valves — 15 years (50%)
- Indoor air handling units — 20 years (100%)
- Exhaust fans — 20 years (100%)
- Finned tube elements — 35 years (100%)
- Heating coils — 20 years (100%)
- Major capital requirements:
 - Heating — establish time schedule and appropriate funds for replacement of outdated heating system and equipment.
 - Ventilation — establish time schedule and appropriate funds for replacement of outdated ventilation system and equipment.
 - Air conditioning — establish time schedule and appropriate funds for replacement of outdated air conditioning system and equipment.
 - Building automation system — replace existing pneumatic controls with DDC controls along with mechanical system replacement.

Electrical:

- The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building). The first 4 floors of the 9-



Fire Alarm Junction Box



Fire Alarm Pull Station



Emergency Battery Pack Light Fixture



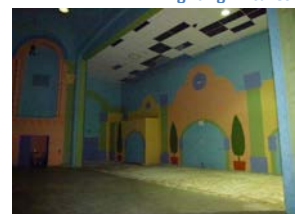
Light Fixture with Temporary Wiring.
Recommend Wiring be Replaced



Light Switches



Lighting Fixtures



Lighting Theatre Converted to Gym



Appendix E – Building Inspection Reports

story building were built in 1964. In 1973, 5 floors were added to the 1964 building in addition to the 5-story building. The Tower Theatre and 2-story retail building were acquired in 1975. The Tower Theatre was built in 1929.

- The electrical substations USS/1 (Room B43) and USS/2 are original to the 1964 building and were originally both located in the basement. USS/1 fed the majority of the 1964 building, which is now the 9-story building. The USS/2 substation is now located on the 10th floor (penthouse) of the 9-story building and feeds the 5-story building. USS/1 and USS/2 substations each have a 13.2 kV feed from WE Energies which transforms to 120/208V. The substations are 48 years old at this point. A third substation USS/3 (located in Room B46) was installed in 1991 per as-built drawings. USS/3 also has a 13.2kV feed from the utility. Per the 1991 drawings, the incoming primary incoming service (PIS) equipment located in Room B02A in the basement was replaced. It was observed that the pipes in this room were rusted. Recommend replacement of substations USS/1 and USS/2.
- The majority of the existing branch panelboards are original to the building. Recommend replacement of all panels up to 1991. Panels from 1991 are 21 years old and are in good condition. Panel B/A in the theatre building is fed from USS/3.
- The existing fire alarm system was installed in 1991 per the as-built drawings dated 2/28/1992. The fire alarm system is by Cerberus Pyrotronics. Recommend replacing the 21 year old system with a new addressable system.
- Existing security cameras appear to be in good shape. Unable to verify age of devices.
- Exit signs are approximately 21 years old per the as-built drawings dated 2/28/1992.
- Emergency battery pack lights in the theatre appear to be from the 1970's and should be replaced.
- Some of the lighting in the theatre was replaced in 1991 per the as-builts. Recommend replacement of lighting with energy efficient lighting.
- There is no lightning protection for the building installed on the roof.



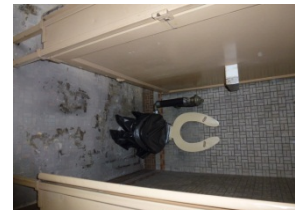
Wiring Remaining from Chandelier



Theatre Building Lighting



Recessed Down Lights



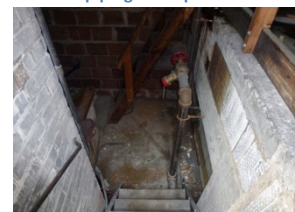
Abandoned water closet



Disconnected drinking fountain



Fire piping with sprinkler heads



Stair standpipe with hose connection



Appendix E – Building Inspection Reports

Plumbing:

- **Year Built:** The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building).
 - 1929 —The Tower Theatre was built. Original building plumbing system.
 - 1975 —Theatre and 2-story retail building were acquired.
 - 1964 —The first 4 floors of the 9-story building were built.
 - 1973 —5 floors were added to the 9-story building in addition to the 5-story building.
- **Plumbing System Description:**
 - Domestic water is original to the building. The system consists of a pair of 1000 MBH hot water boilers with a large storage tank.
 - The 4" domestic water service enters in the mechanical room. The mechanical room is located on the basement in the nine-story building. A package with dual base-mounted 7.5 horsepower pumps elevate water pressure and flow demand required of their plumbing fixtures and plumbing equipment.
 - Domestic water piping in the building appears to be a mix of black steel, galvanized and copper piping. Generally, the piping appeared to be old and in fair condition for its age with observed leaks. Due to the age of the building, asbestos material contained throughout the piping for plumbing and heating systems.
 - Soil, waste and vent piping consists of cast iron piping. Most cast iron piping that could be observed appeared to be in fair condition for its age with no apparent leaks.
 - The gas service enters the building with the meter located outside the main building entry to the mechanical room. All piping is black steel with welded and threaded joints. The gas piping appears to be in good condition.
- **Overall building plumbing system condition:**
 - All main risers are galvanized. For supply lines and smaller drain lines galvanized pipe was used. This pipe



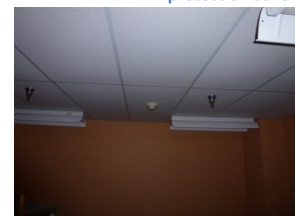
Upright sprinkler heads



Exposed fire piping with sprinkler heads



Downright sprinkler head with protection cover



Downright sprinkler head in the ceiling



Appendix E – Building Inspection Reports

can rust and corrode over time, leading to low pressure and leaks. Existing plumbing equipment, piping hangers, supports, valves, pumps, and gas piping are original and appeared to be in fair condition.

- The majority of plumbing fixtures and related trim in the building appear to be in fair to poor condition and in general need of major replacement. Typical restroom consists of wall mounted toilets and sinks with the men's public restrooms containing floor-mounted and wall mounted urinals.
 - The individual drains appeared to be mostly clear. Most fixtures drained relatively freely with the faucets running for an extended period.
 - The type of piping installed at all areas is not indicated. Temperature mixing valves are not installed.
 - Drinking fountains are at the end of their useful life and potentially critical.
- Operational issues:
- Existing plumbing fixtures cause energy loss year round. Provide new auto-flush valves at new ADA water closet. Plumbing piping shall be insulated and heat traced.
 - Older plumbing system may not support the pressure and waste removal requirements of modern functions.
 - Provide temperature mixing valves.
 - Install shut-off valves for every water supply to fixtures.
- Major capital requirements:
- The overall condition of the plumbing systems is not good. All valves need adjustment, O-ring and packing replacement, gasket replacement, filter changes, and gate, globe and seat replacements to prevent leaks.
 - Older fixtures do not have the flow characteristics of newer ones. Older fixtures are likely to have higher flow rates while newer fixtures can save a great deal of water – as much as 50%.
 - Provide new reduced-pressure backflow preventers with upstream and downstream shutoffs and test fittings to protect potable water in continuous-pressure conditions and against high hazard contaminations.



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Fire Protection:

- **Year Built:** The existing City Campus building complex consists of a west section (9-story building) and an east section (theatre, 5-story building and retail 2-story building).
 - 1929 —The Tower Theatre was built.
 - 1975 —Theatre and 2-story retail building were acquired.
 - 1964 —First 4 floors of the 9-story building were built.
 - 1973 —5 floors were added to the 9-story building in addition to the 5-story building.
 - 1991 —Original building fire protection system.
- **Fire Protection System Description:**
 - There are major deficiencies noted in the fire protection system. It is in poor condition with numerous areas of apparent past leakages. Fire pump and piping system located at the basement level. The 30 horsepower electric motor and fire pump, the small air compressor and 1 HP jockey pump appear to be in fair condition.
- **Overall building fire protection system condition:**
 - The complete fire suppression sprinkler system has 6" water service with individual control box outside the building. The sprinkler main is complete with alarmed flow station and tamper switches.
- **Operational issues:**
 - The system was observed in a visual review only.
- **Major Capital Requirements:**
 - There are major capital requirements involved at this time. Valves and piping are covered with oxidation, corrosion and evidence of motor oil leakage.
 - Corrosion monitoring system can provide early warning of corrosion problems that can do irreparable harm to fire protection system if left unchecked.
- **Safety:**
 - The building is not bounded by fire rated doors, dampers and penetration seals.
- **Summary:**
 - Sprinklers are highly desirable for life safety and property protection. Existing automatic fire suppression system is in fair condition and requires proper maintenance. No backflow prevention was observed.



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